SERVICE MANUAL **CP430/PMD430**

marantz®

model CP430/PMD430

Stereo Cassette Recorder

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound. Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS:
Parts can be ordered either by mail or by telex. In both cases, MARANTZ part number has to be specified. If you order by mail, fulfil MARANTZ order forms.

MARANTZ S.A.
EUROPEAN PARTS DEPARTMENT
2, Avenue Léopold III
B-7120 PERONNES-lez-BINCHE
BELGIUM
TWX: 57589 SEPLT B

MARANTZ NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
Phone: 1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

PARTS ORDERING:
Parts may be ordered from the following addresses:

EUROPE

MARANTZ S.A.
European Parts Department
2, Avenue Léopold III
B-7120 Péronnes-lez-Binche
Belgium

MARANTZ S.A.
326 Avenue Louise Bte 32
1050 Bruxelles
Belgium

MARANTZ AUDIO U.K. LTD
Unit 15/16
Saxon Way Industrial Estate
Moor Lane
Harmondsworth UB7 OLW
Great Britain

MARANTZ AUSTRIA Ge.M.B.H.
25 Franz Lisztgasse
2380 Perchtoldsdorf
Austria

MARANTZ BELGIUM
45 Rue Auguste Van Zande
1080 Brussels
Belgium

MARANTZ DENMARK
Bregnerødvej 132b
3460 Birkerød
Denmark

MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnières
France

MARANTZ GERMANY G.M.B.H.
Max Planckstrasse 22
6072 Dreieich 1
Germany

MARANTZ ITALIANA S.p.A.
Via Monte Napoleone 10
20121 Milano
Italy

MARANTZ NEDERLAND B.V.
Wagenmakersweg 3
3449 HV Woerden
Netherlands

MARANTZ SVENSKA A.B.
Svartviksvägen 56
Träneberg
Bromma
Sweden

AUSTRALIA

MARANTZ AUSTRALIA PTY
19 Chard Road
Brookvale, NSW 2100
Australia

U.S.A.

MARANTZ COMPANY, INC.
National Service Dept.
P.O. Box 577
Chatsworth, CA 91311
U.S.A.

JAPAN

MARANTZ JAPAN, INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

> In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

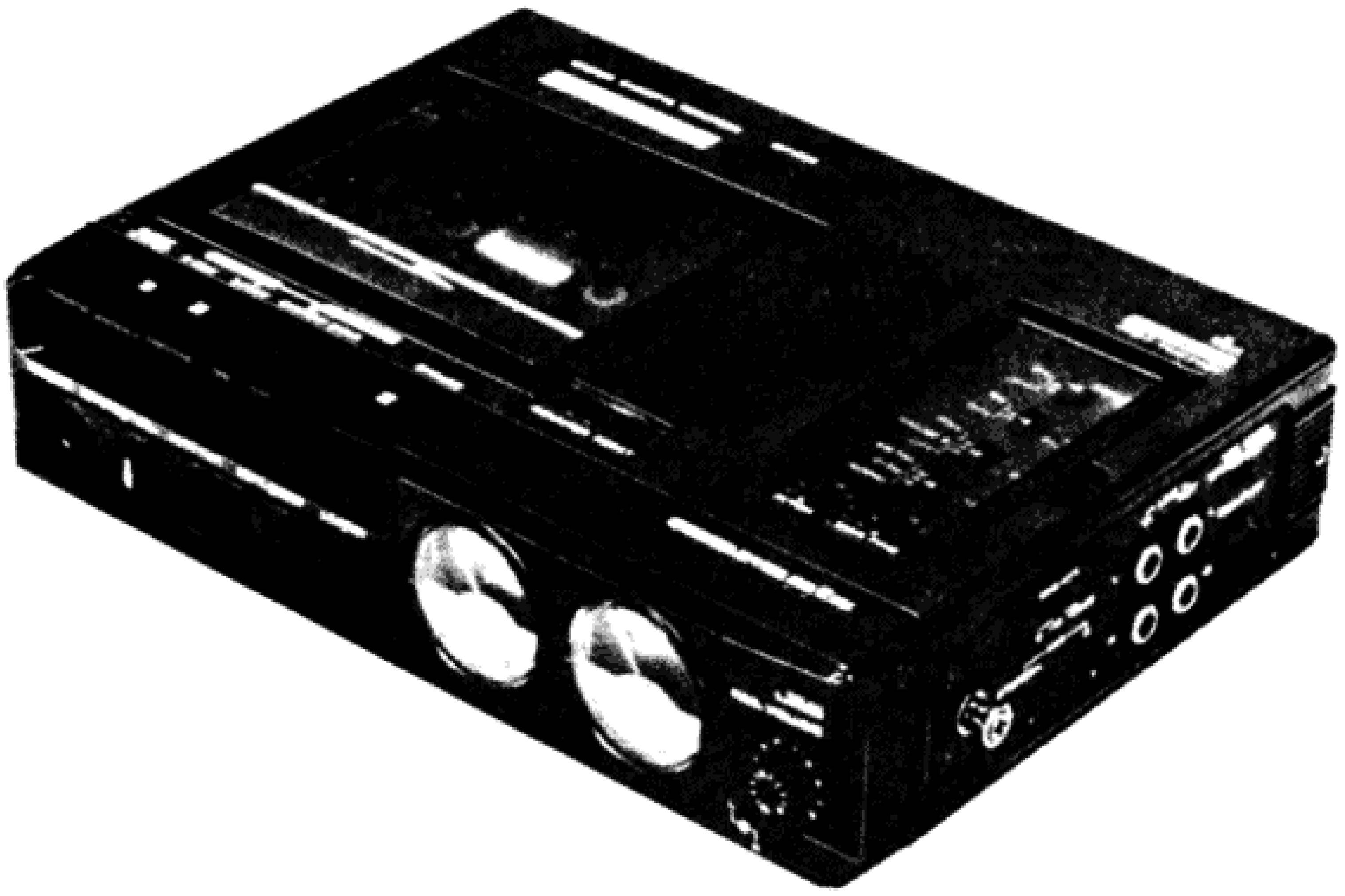
NOTE—FOR U.S.A. ONLY
Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from MARANTZ NATIONAL PARTS DEPARTMENT.

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MODEL CP430/PMD430 STEREO CASSETTE RECORDER



INTRODUCTION

This service manual are prepared for use by Authorized Warranty Station and contains service information for Marantz Stereo Cassette Recorder.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the Cassette Recorder.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can be usually obtained through local suppliers.

1. SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis button.

Any resistance measurement less than 1 Megohms should cause unit to be reparied or corrected before AC power is applied, and verified before return to user/customer.

Ref. UL Standard NO. 1270. Para 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

2. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of your Cassette Recorder consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. **Rec/Play Amp ..... mounted on P.W. Board PK01**
2. **TAPE EQ AMP .... mounted on P.W. Board PJ01**
3. **ATT Switch .... mounted on P.W. Board PK03**
4. **L.E.D. .... mounted on P.W. Board PX02**
5. **Mecha Control ..... mounted on P.W. Board PM01**
6. **Control Switch ..... mounted on P.W. Board PS01**
7. **Light .... mounted on P.W. Board PX01**
8. **Mic Mode .... mounted on P.W. Board PK02**
9. **Dolby NR L ...... mounted on P.W. Board P601**
10. **Dolby NR R ...... mounted on P.W. Board P602**

3. TEST EQUIPMENT REQUIRED FOR SERVICING

For measuring or checking your Cassette Recorder, the following instruments and materials are necessary.

- VTVM
- Audio Oscillator (AF OSC)
- Attenuator (600 Ω)
- Oscilloscope
- Bandpass Filter (1 kHz)
- IEC A-Curve Filter
- Wow and Flutter Meter
- Torque Meter (Cassette Type)
- Digital Frequency Counter
- Distortion Meter
- Blank Tapes (Completely erased with bulk eraser)
  TDK AC-212 (Normal)
  TDK AC-512 (Special/CrO_2)
  TDK AC-712 (Metal)

NOTE: If any doubt is noted in a measured value, use new tape.

• Test Tapes	(New Tape)
MTT-111	Wow and Flutter, Tape Speed
MTT-112	Measurements of Output Level
MTT-112B	Signal-to-Noise Ratio
MTT-150	Adjustment of Output Level
MTT-256	Frequency Response (for Normal)
MTT-356	Frequency Response (for Special/ CrO_2 and Metal)
MTT-121	Cross Talk
MTT-141	Channel Separation

4. MECHANISM AND CIRCUIT DESCRIPTION

4.1 Muting System

The muting circuit is provided to reduce the pops noise when generates on the Line Out at power ON/OFF.

1) When power is turned on . . . . .

As the base voltage of QU03 is higher than the emitter voltage during the charge current flows to QU02 through RU03 & RU02, QU03 is ON and it sends the muting voltage.

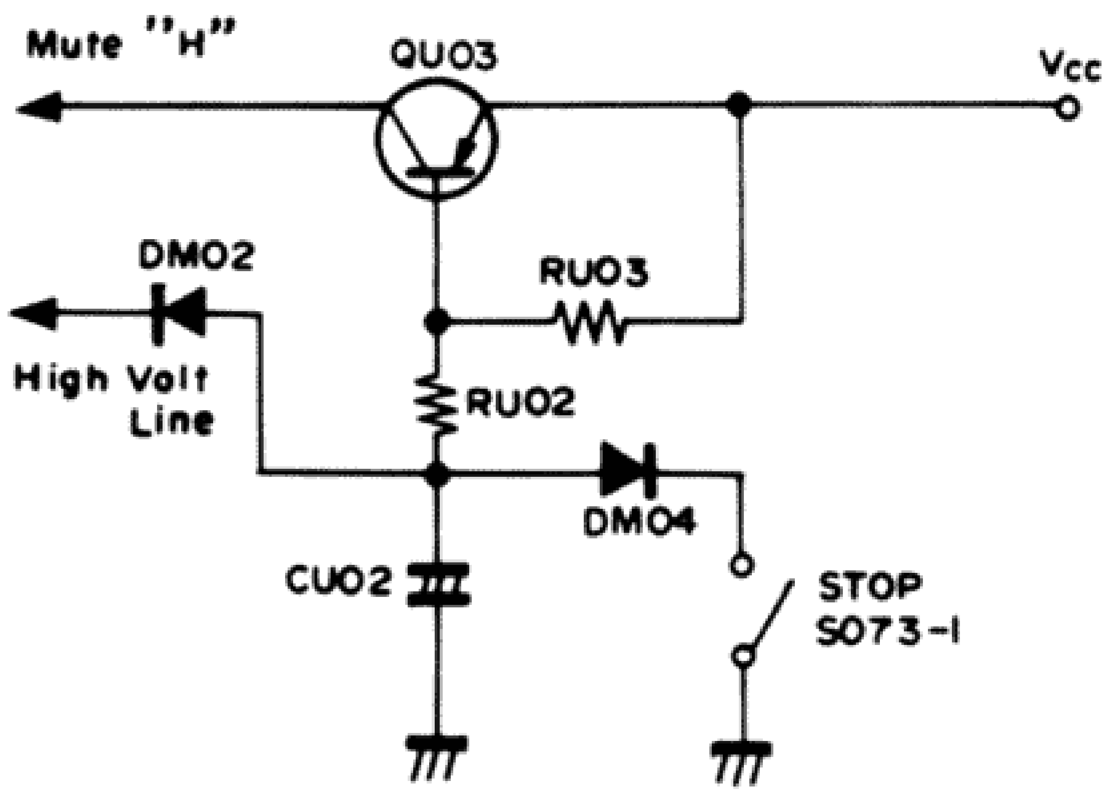
CU02 have been charged up, both the base and the emitter voltages of QU03 is equal. QU03 is OFF and the muting is released.

2) When the STOP button is depressed . . . . .

When the stop switch S073-1 is ON, the base current flow through DU04. Also discharging CU02, QU03 is ON instantly, the muting system operate to reduce the pops noise at power ON/OFF.

DM02 provides to discharge CU02 on AUTO STOP.

As the muting time is in proportional to capacitance of CU02, it is presetted by matching the threshold time of TAPE EQ Amp.



4.2 Auto PLAY and Automatic Rewind Stop

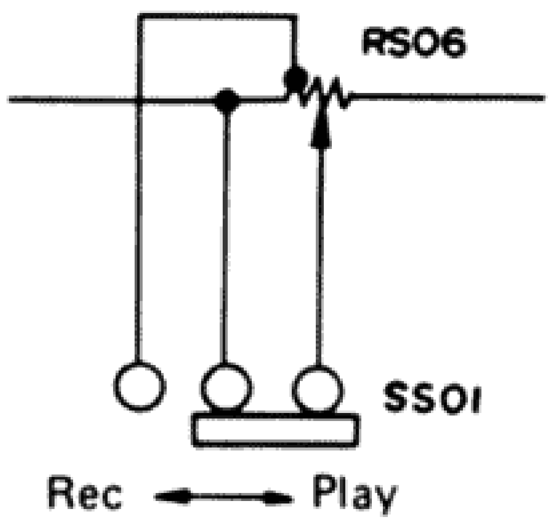
With SS01 set to ON during PLAY, the rewind button will lock when pressed. When counter reaches 999, the rewind lock releases and the PLAY operation resumes. In this condition, both CUE and REVIEW buttons do not operate and both buttons are locked. Also, when the FF button is pressed and locked in place, the lock releases when the counter reaches "900" and the PLAY mode is entered. When the tape has finished winding in both modes before the counter reaches the respective positions, the AUTO STOP function and all buttons are released. Also when the REWIND button alone is locked, the tape rewinds and rewind stops when the counter reaches "999". The same applies for fast foward operation which stops at "900". When the counter is between "900" and "999". both REWIND and FF bottons do not lock.

4.3 Auto Stop

The AUTO STOP function which detects the end of the tape is carried out by hole IC (QM08). The signal from QM08 is added to the pin ④ of QM07, while the auto stop duration is designated inside QM07. The time it takes for the auto stop function to activate after the tape stops, is determined in CM08. At this time TE is TE = 75 X CM08 (μF)mSec, while TW is TW = 30 X CM07 (μF) mSec as long as the auto stop function is operating. When it does not shut off the first time, TE--Tw--TE--TW is repeated until it shuts off.

4.4 Pitch Control

The pitch control is used to vary the tape speed for playback operation. During recording, it is automatically set to the RS06 center position by SS01.



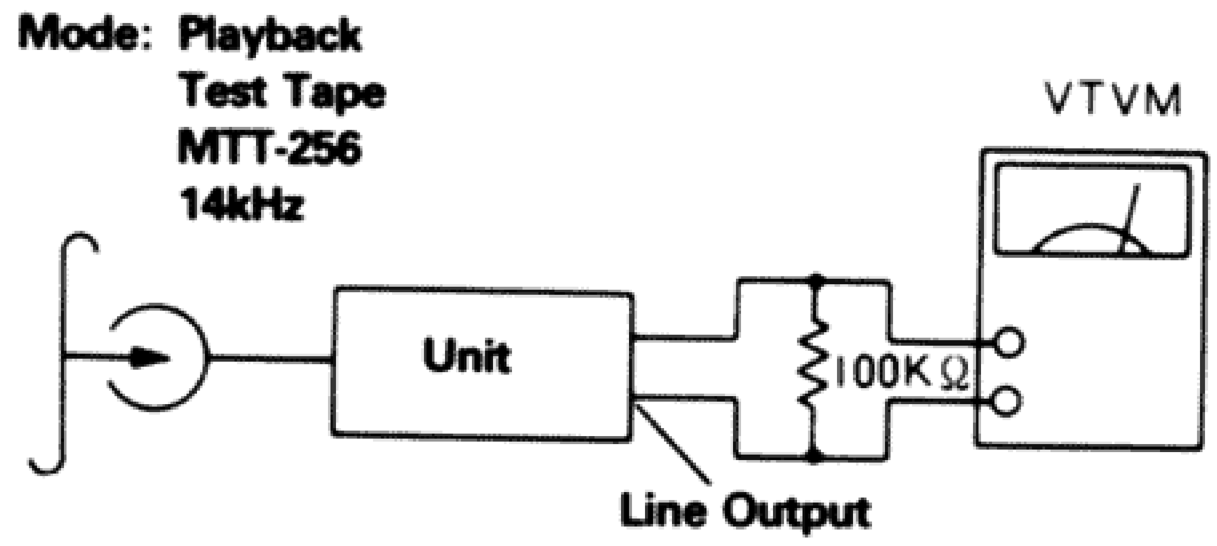
5. ELECTRICAL ADJUSTMENTS

Precautions for Adjustment and Measurement

1. Before playing back the test tape, thoroughly demagnetize the heads, capstan and similar metal parts using an erase, as the test tape-recorded tone is easily erased.
2. Do not place the test tape on any measuring instrument.
3. Do not put the test tape near a place where the eraser is used.
4. Method of Demagnetization: Turn the eraser power switch on at a position far away from the heads. Bring the eraser close to the heads, capstan and other parts to be demagnetized, and move it up and down four or five times to demagnetize. Slowly separate the eraser far away from the parts, and turn the power switch off.
5. Do not use any magnetized adjusting tool. If necessary, demagnetize with a bulk eraser from time to time in the course of each adjustment.
6. Do not turn semi-fixed resistor or coil more than needed.
7. Measure speed and wow and flutter in the normal operating state.
8. Do not apply locking bond excessively.
9. Check the line voltage and the output of low frequency oscillator 2 – 3 times a day to see if they are set as specified.

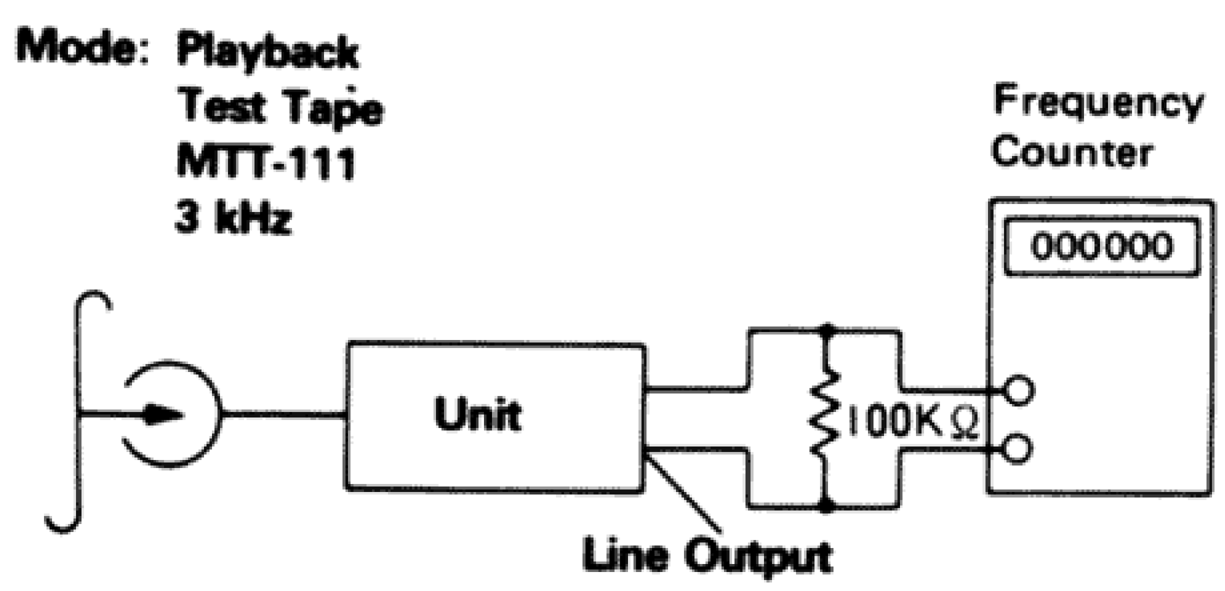
5.1 Head Azimuth Adjustment

1. Play the test tape MTT256 back. Adjust the head azimuth adjusting screw for maximum VTVM reading.
2. If the peak levels of the left and right channels are different set the screws to obtain the mechanical center between the peaks.
3. After adjustment, repeat the playback and stop settings several times to confirm no azimuth deviation.
4. After adjustment, lock the screws with bond.



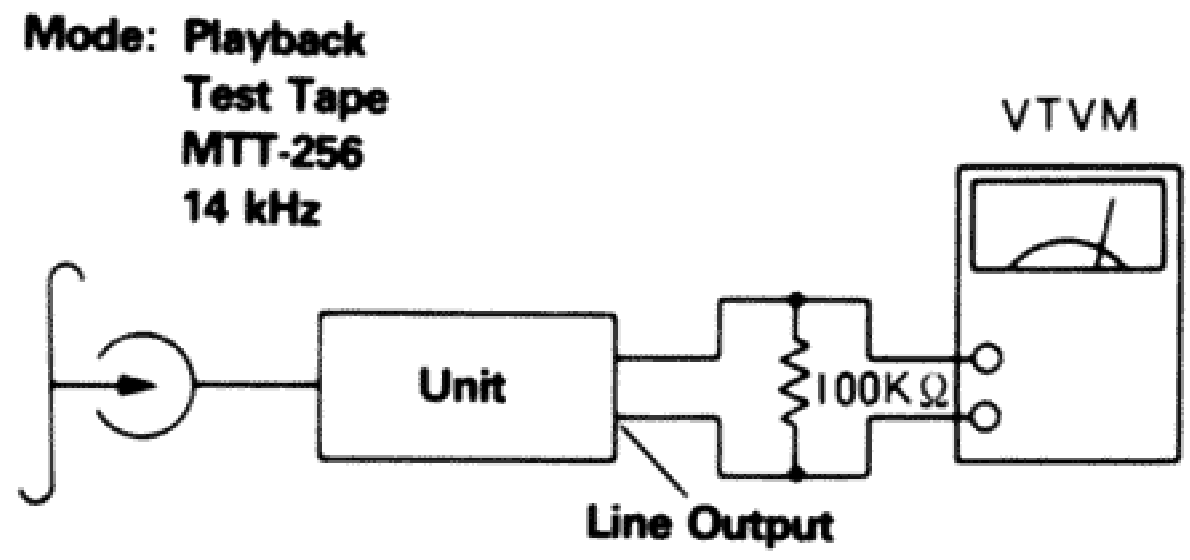
5.2 Tape Speed Adjustment

1. Play the 3kHz signal of the test tape MTT-111 back.
2. Adjust the adjusting resistor (RM05) on the PM01 P.W. Board so that counter readings are between 2990 – 3010Hz.



5.3 Playback Equalizer Measurement

1. Adjust the tape selector switch to NORMAL.
2. Play the 315Hz signal of the test tape MTT-256 back. The VTVM at 0dB.
3. Play the 12.5kHz signal of the test tape back. Confirm a frequency response of 0 to 1dB in reference to the 315Hz signal level.
   Then, play the 12.5kHz signal back. Set the tape selector to CrO_2, Metal. Confirm the 12.5kHz signal readings at – 4.5dB, ±1dB.

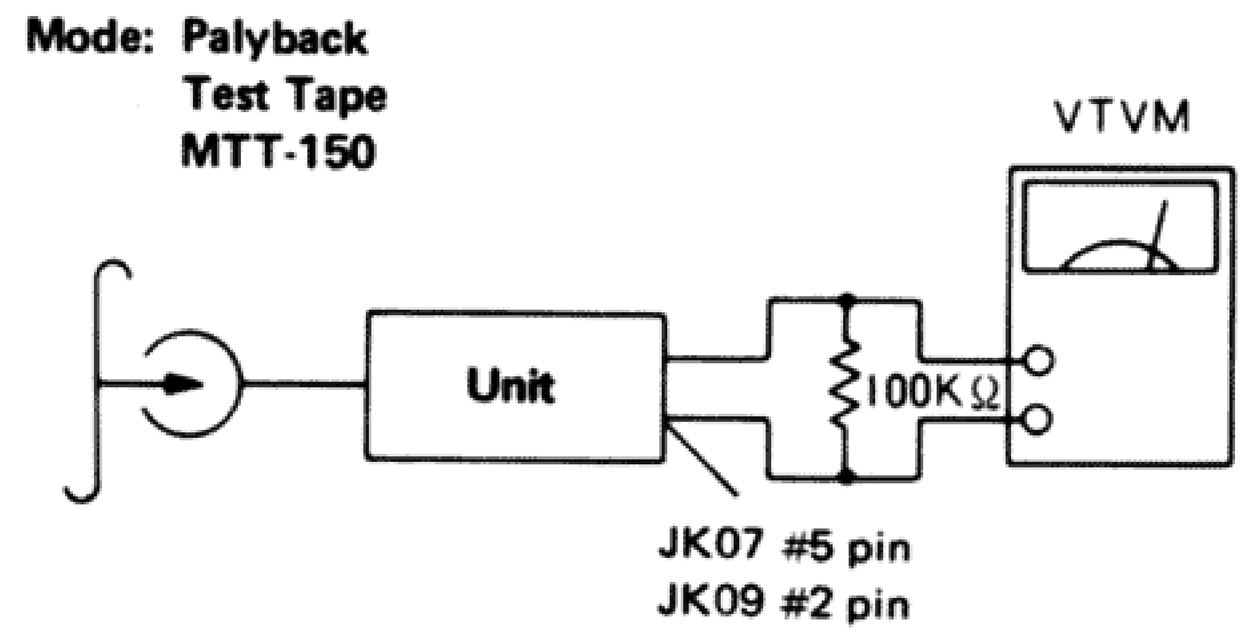


5.4 Playback Level Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK03(L) and RK04(R) so that the voltage of JK07 ⑤ pin and JK09 ② pin is 100 mV. In this operation, make sure the voltage of LINE OUT reads 500 mV + 1 dB.

NOTE:

1. Proceed both for the right and left channels in the same way.



5.5 Level Meter Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK73(L) and RK74(R) at +3dB Level Meter reading.

5.6 Playback Noise Measurement

1. Set the selector switch to NORMAL and NR switch to OFF.
2. Play back the blank tape and make sure that the noise volume is below 2mV when the REC LEVEL Knob is set to both maximum and minimum.

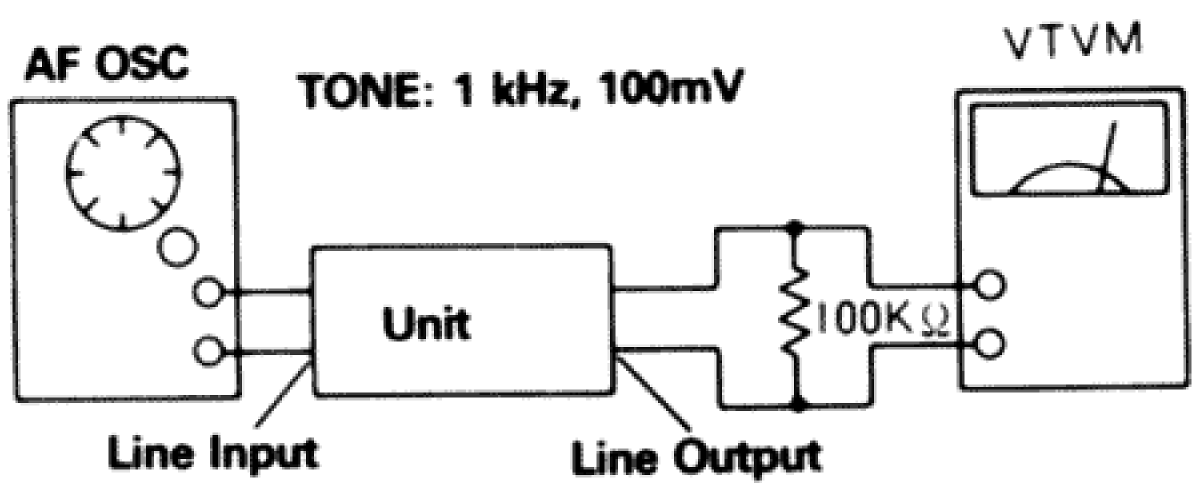
NOTES:

1. Perform measurements when the power hum is at minimum.
2. Perform measurements under conditions where induction noise will not affect measurements.

5.7 MPX Filter Adjustment

1. Adjust the tape selector switch to NORMAL.
2. Put the blank tape in the cassette holder, and set the SK03 in the Source position. (MPX Filter: ON).
3. Add a 1kHz, –20dB signal to LINE IN. Adjust the Rec. Volume knob to 0dB Level Meter reading.
4. Set the input signal at 19kHz ±10Hz. Adjust L602(L) and LG61(R) to the minimum level.
   If the value is 40dB or more, the adjustment is completed.

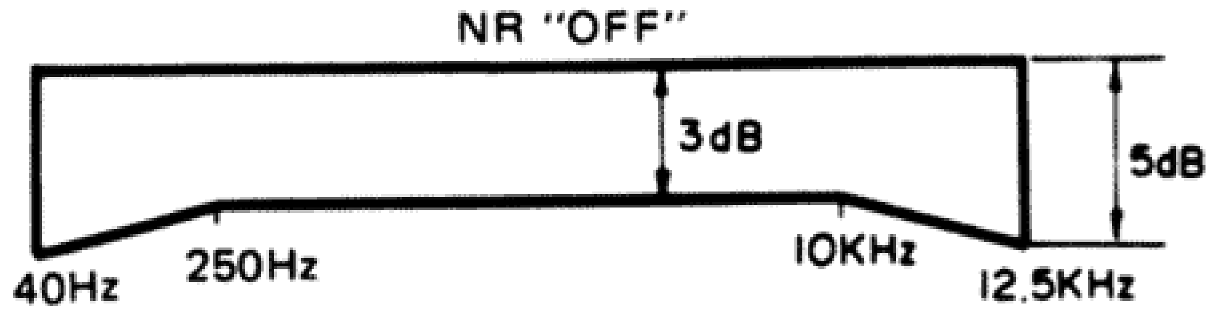
Mode: record

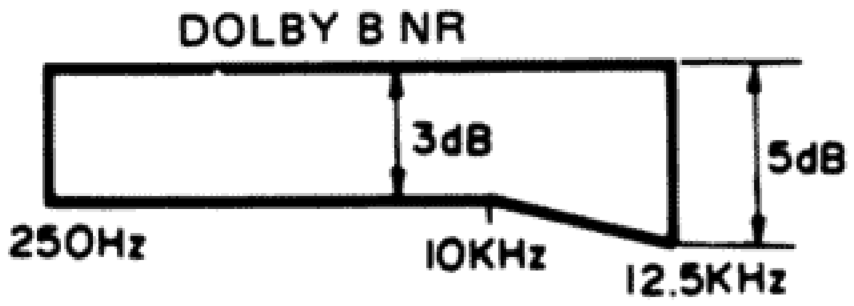


5.8 Record/Playback Frequency Response and Record Level Adjustment

[NORMAL]

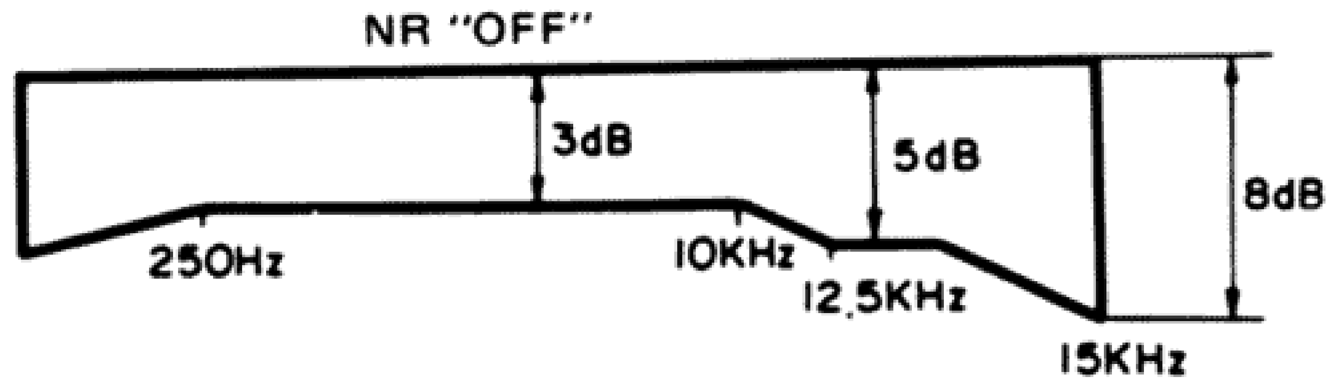
1. Set the tape selector switch to NORMAL.
2. Set the MPX filter to OFF and Dolby NR to Dolby B.
3. Insert the AC-212 test tape in the cassette holder and set the recording conditions. Set the monitor switch to SOURCE and attenuate from 1kHz, 500mV to –25dB on Line Out.
4. Set the monitor switch to TAPE and adjust RL07(L) and RL08(R) so that the level for 1kHz and 10kHz is brought within ±0.5dB.
5. Adjust RK41(L) and RK42(R) so that the level of 1kHz is the same when the monitor switch is changed from SOURCE to TAPE.
6. After making these adjustment, record and playback at 1kHz, 10kHz, 12.5kHz. Make sure results comply with the following diagram.

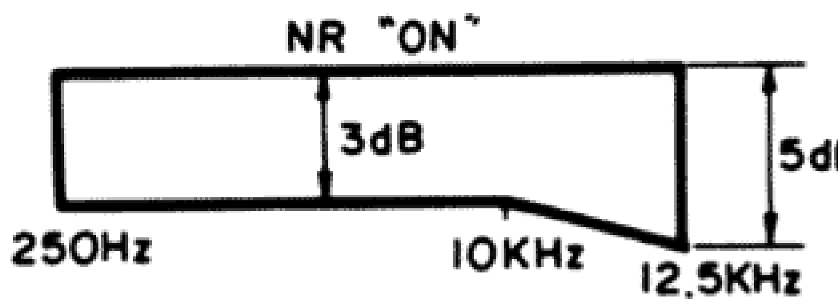




[CrO_2]

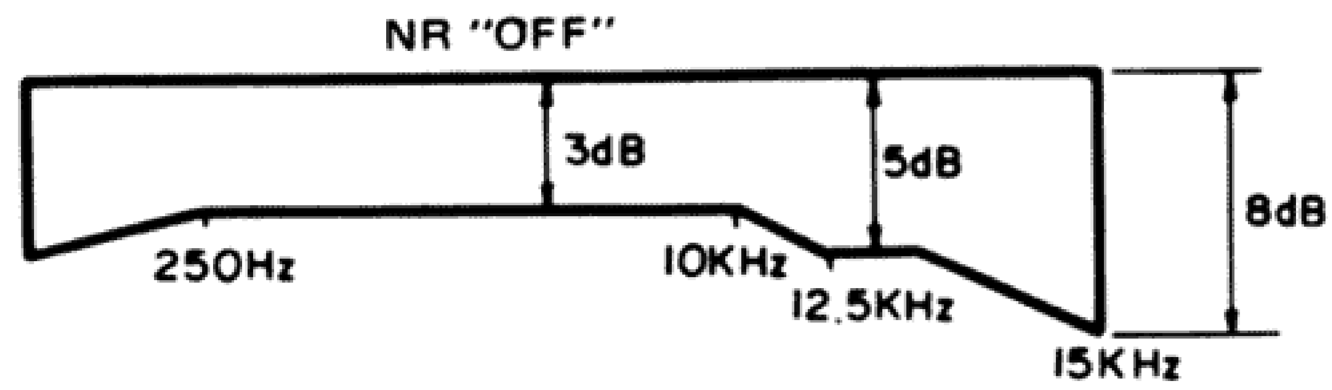
1. Set the tape selector switch to CrO_2.
2. Insert the AC-512 test tape in the cassette holder and set the recording conditions. Attenuate from 500mV to –25dB on Line Out with the attenuator and record at 1kHz, 10kHz, 12.5kHz and 15kHz on an unrecorded section of the tape.
3. Record and playback at 1kHz, 10kHz, 12.5kHz and 15kHz. Make sure results comply with the following diagram.

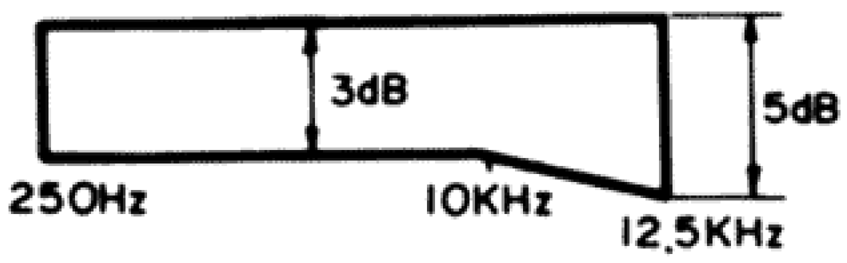




[METAL]

1. Adjust the Tape Selector Switch to METAL.
2. Load the test tape AC-712 into cassette holder. Perform measurements as with CrO_2, and make sure they conform with the Chart.



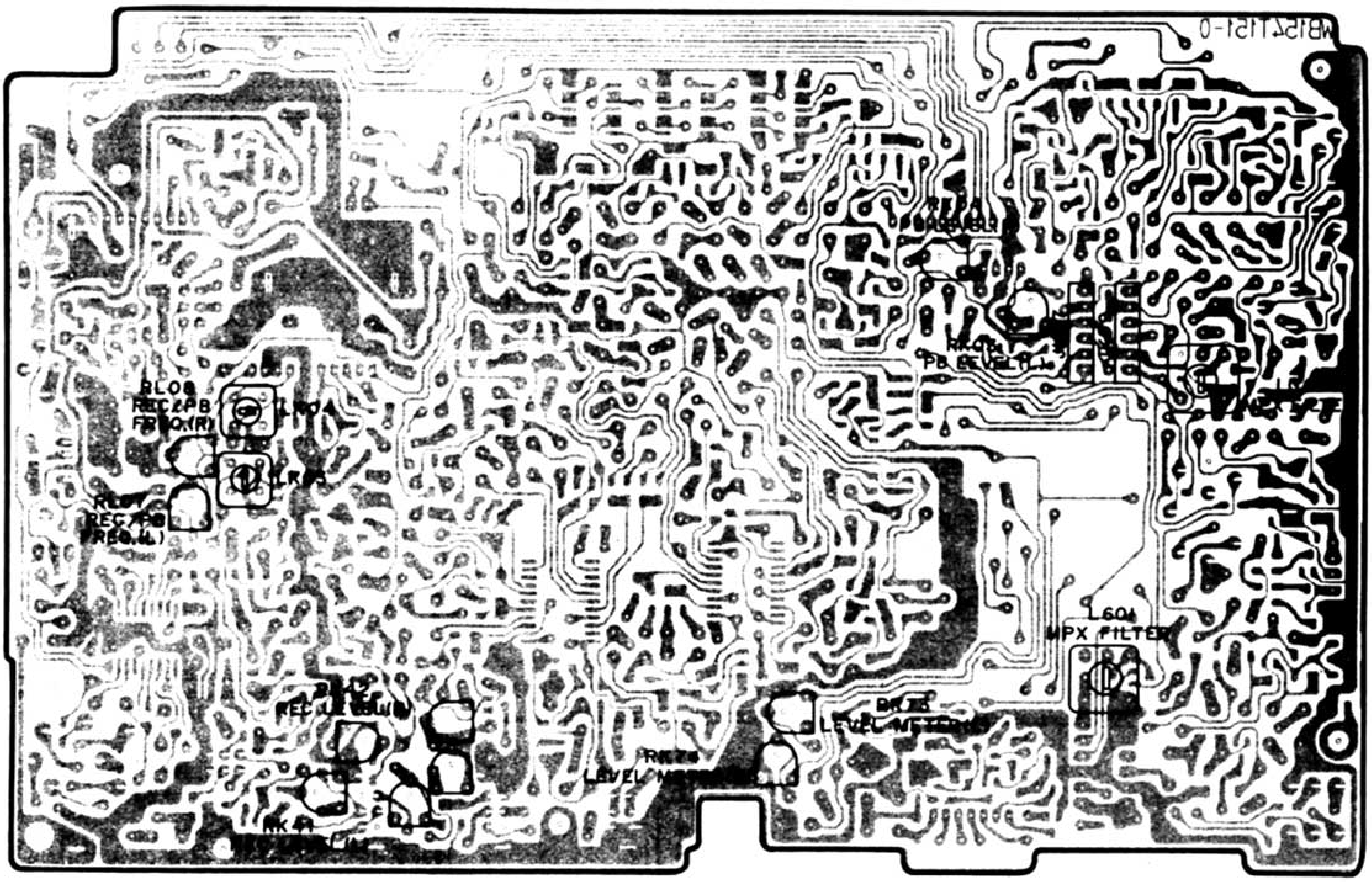


NOTE:

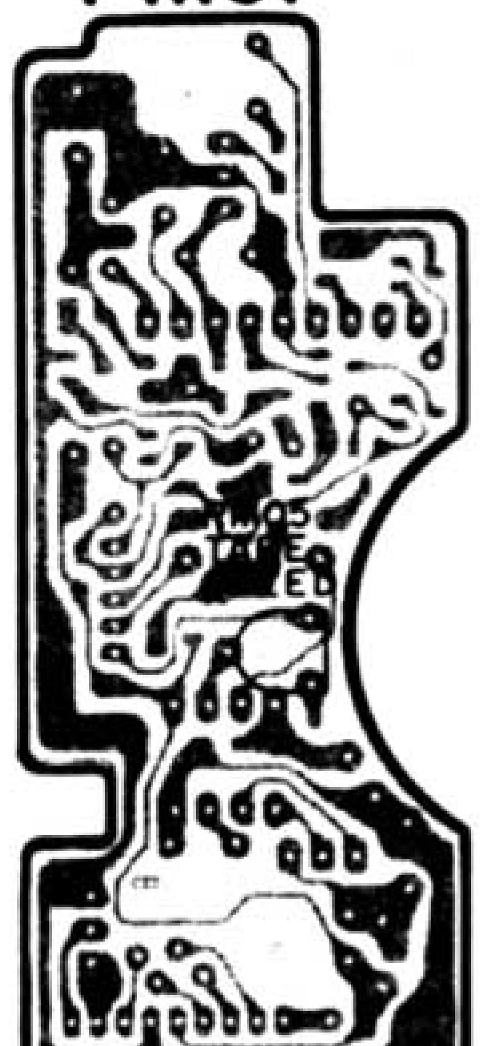
Adjustment points for NORMAL, CrO_2, METAL are common with CB01(L) and CB02(R).

5.9 Alignment Points

PK01

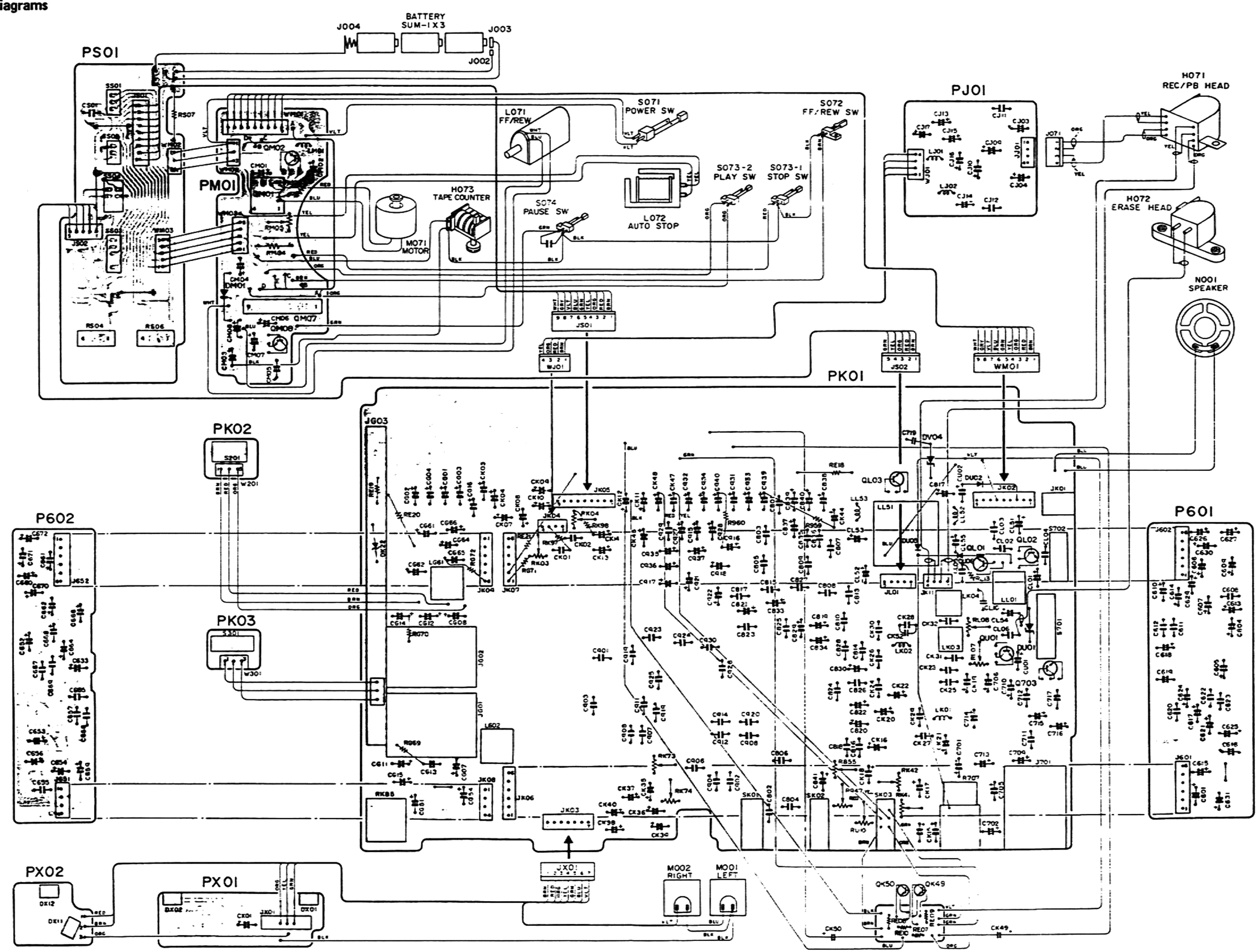


PM01



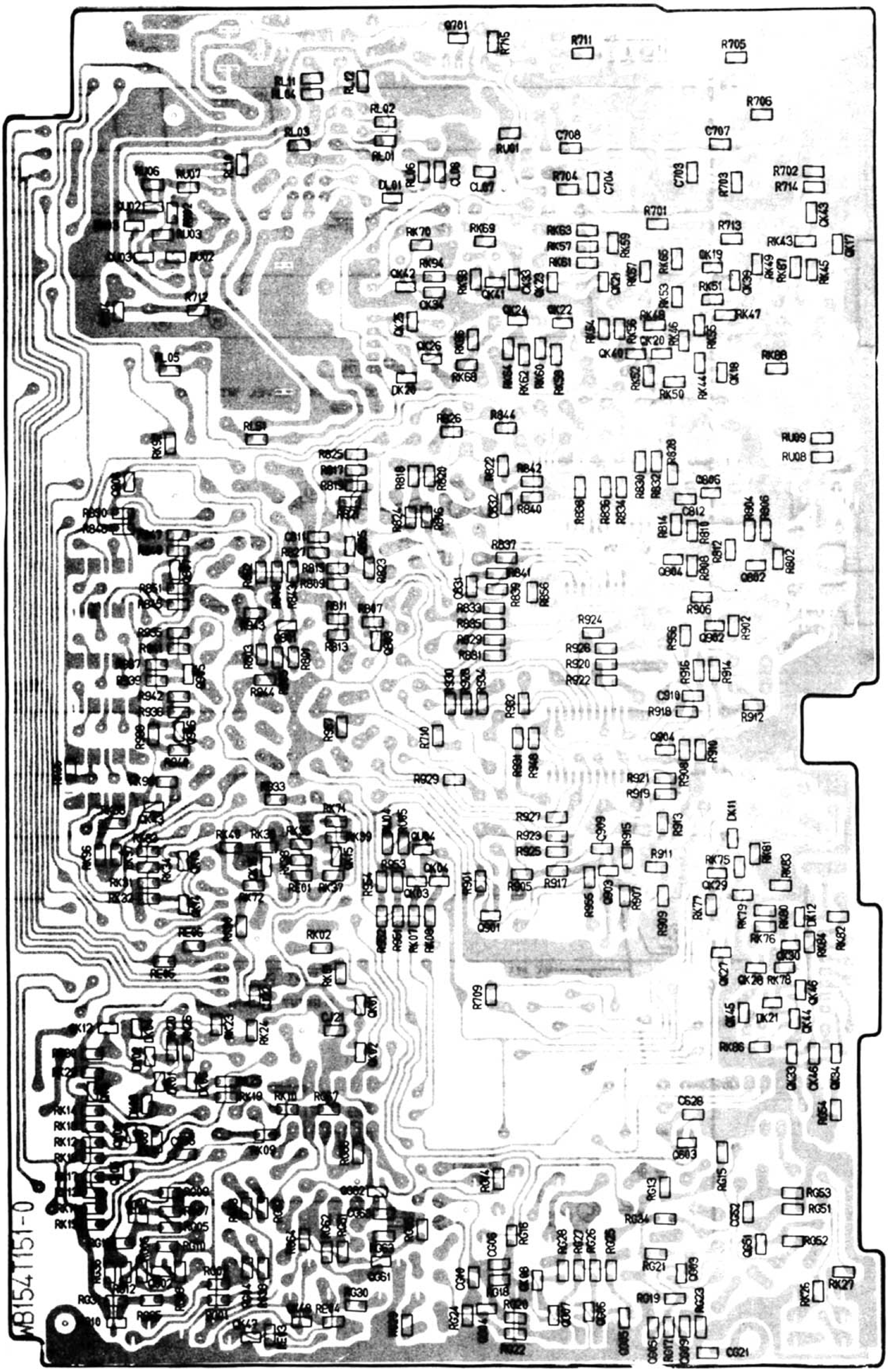
6. DIAGRAMS

6.1 Wiring Diagrams

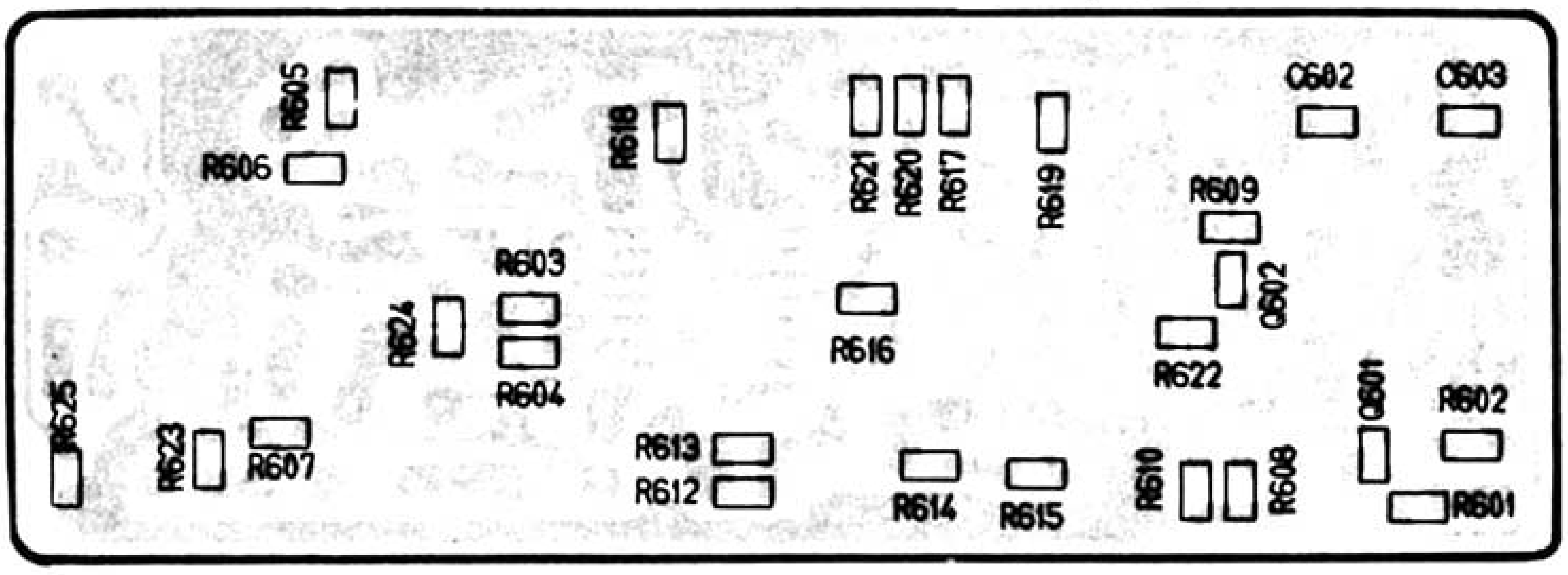


6.2 Chip Parts Component Locations

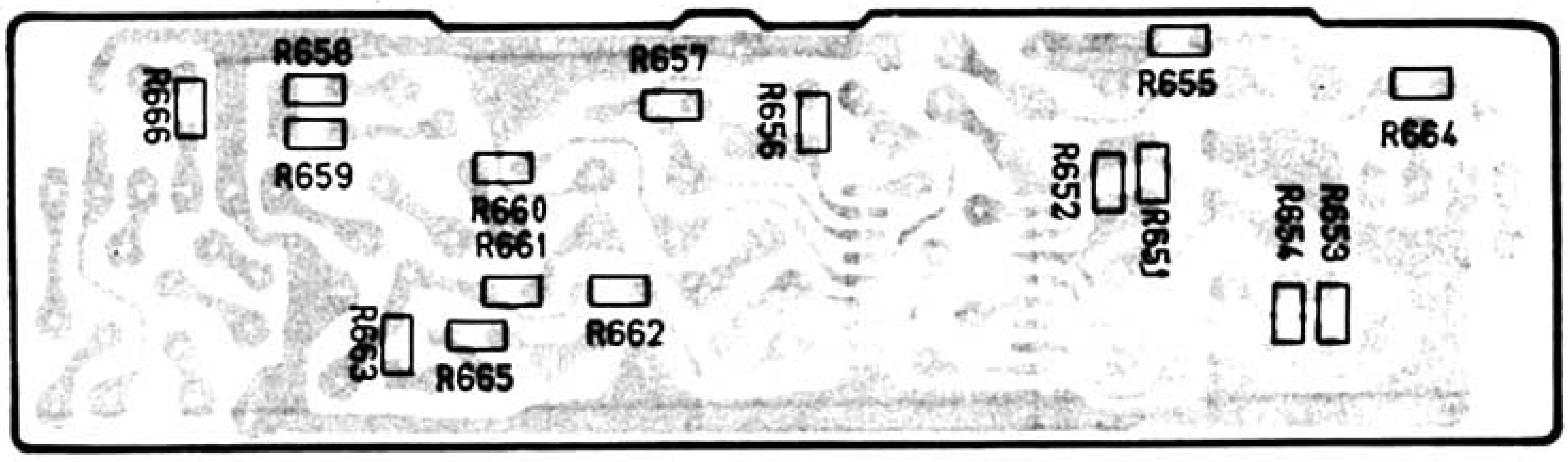
PK01



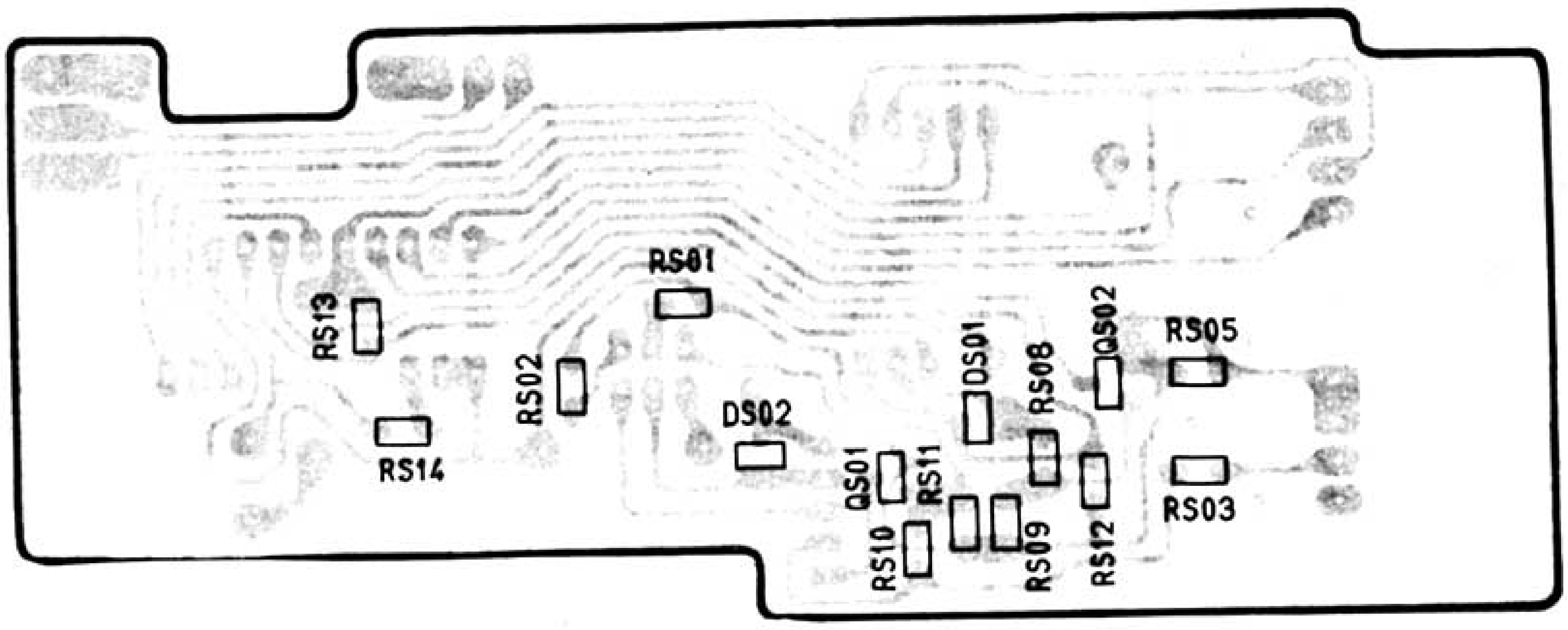
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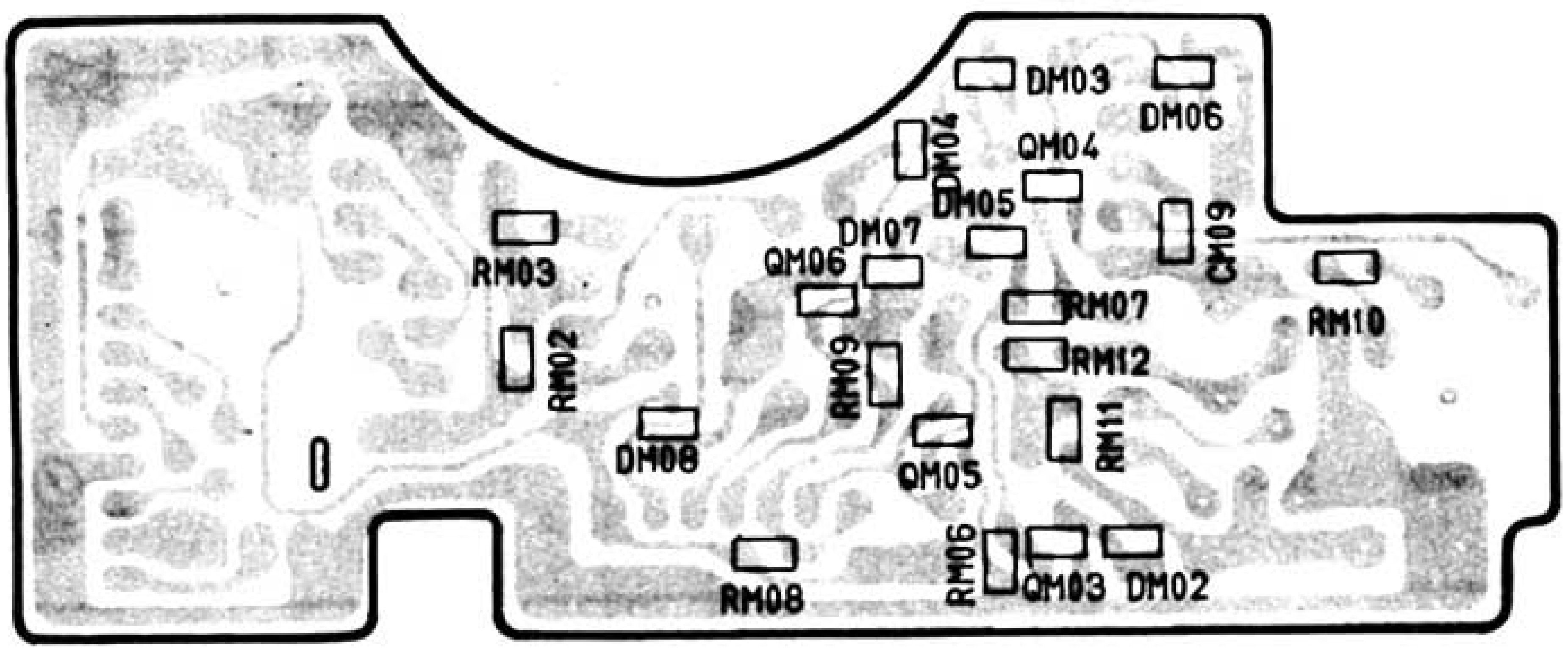
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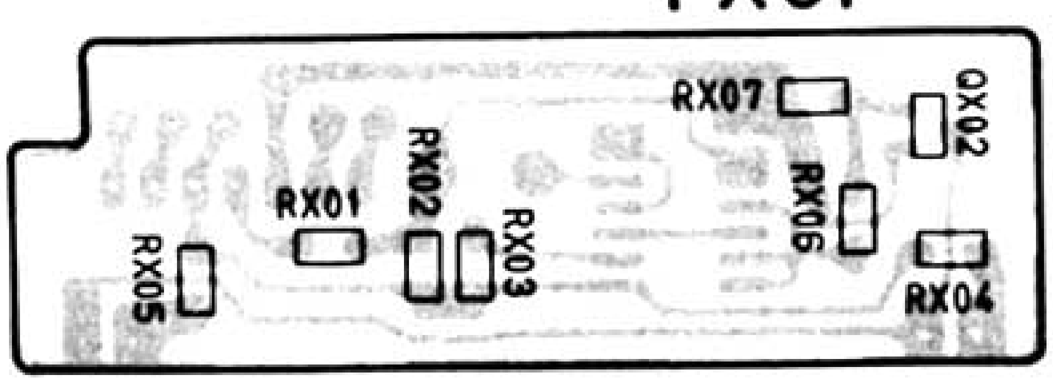
PS01



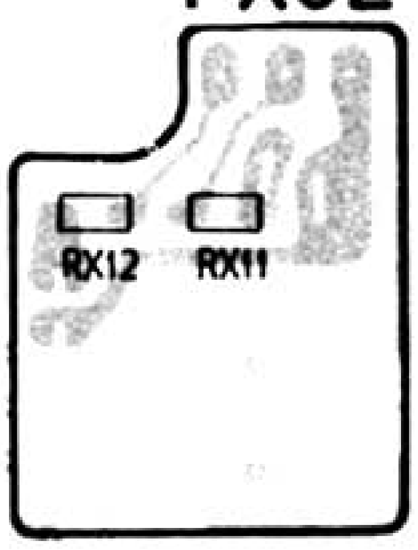
PM01



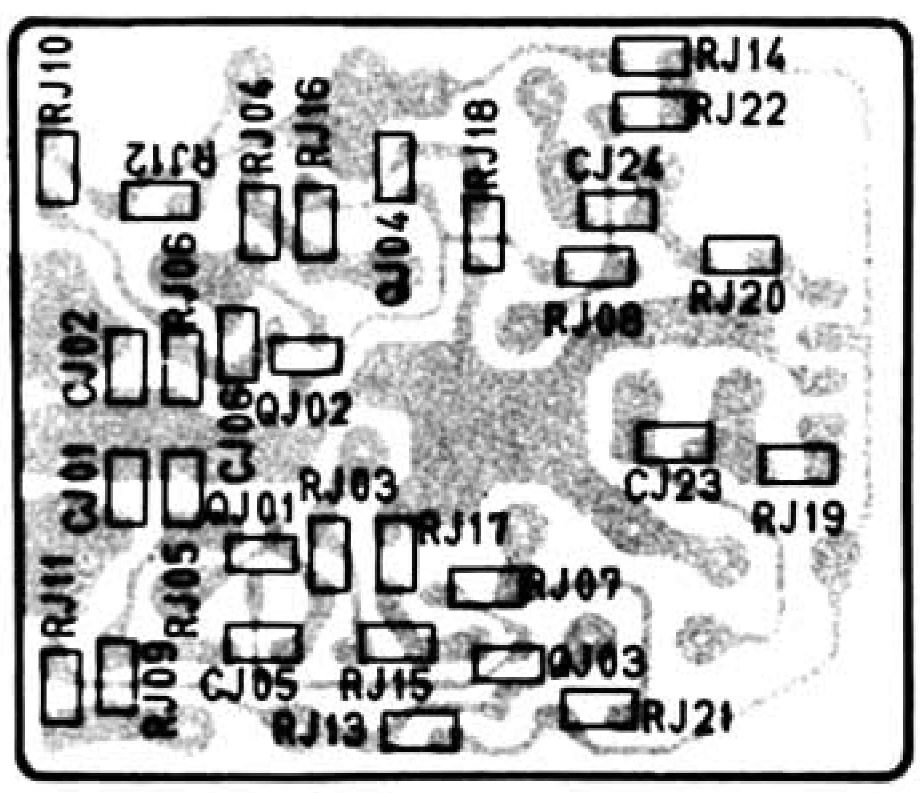
PX01



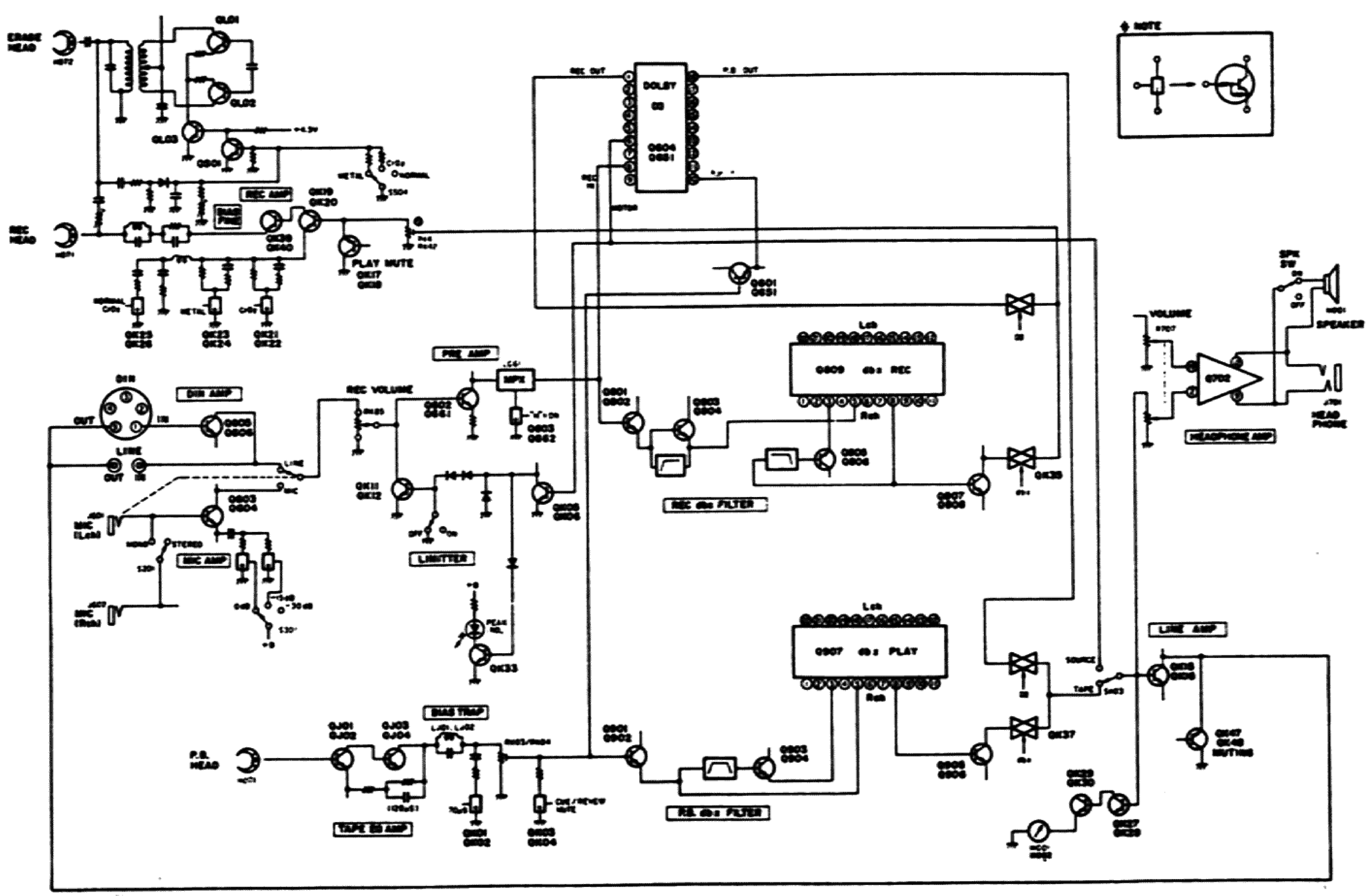
PX02

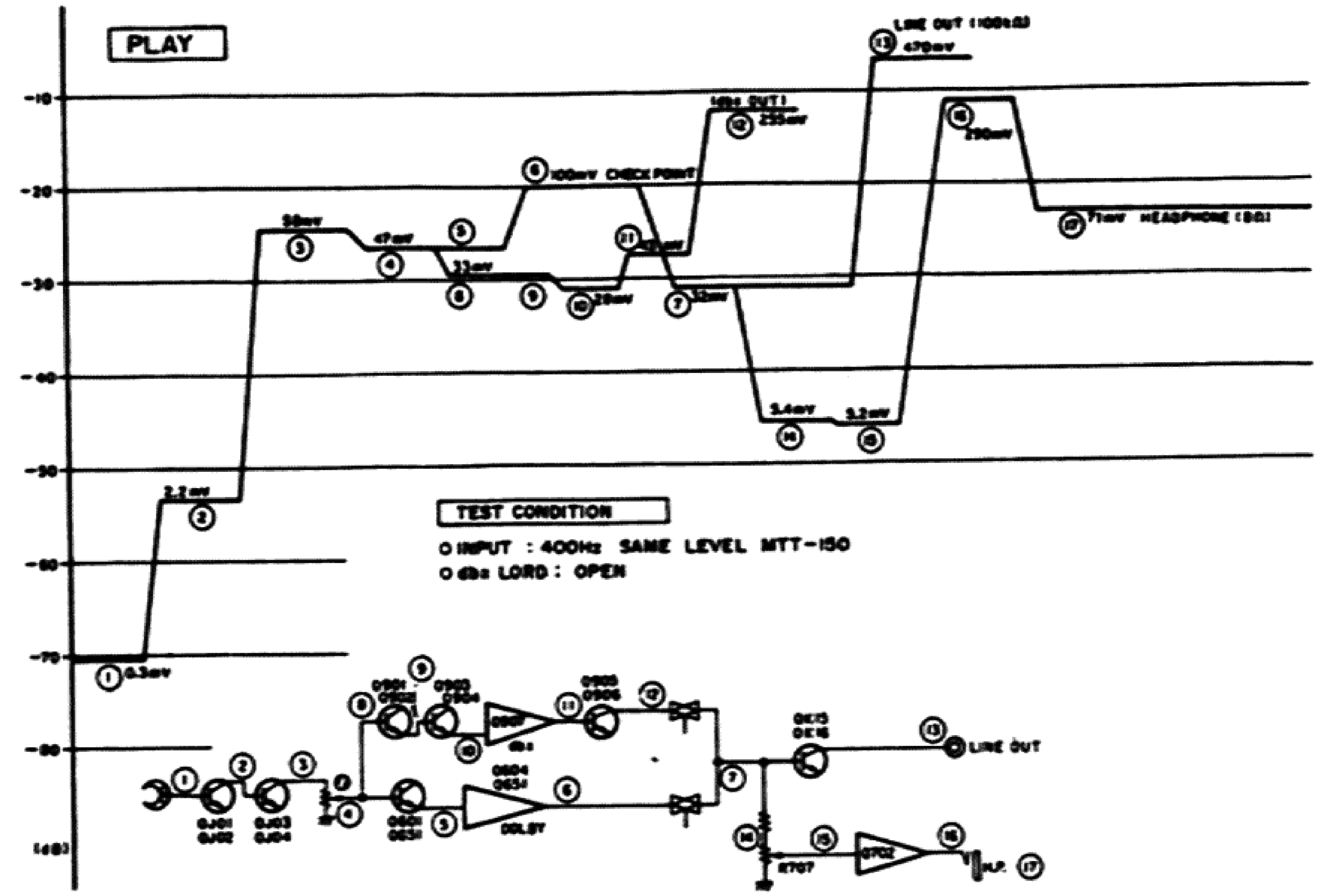


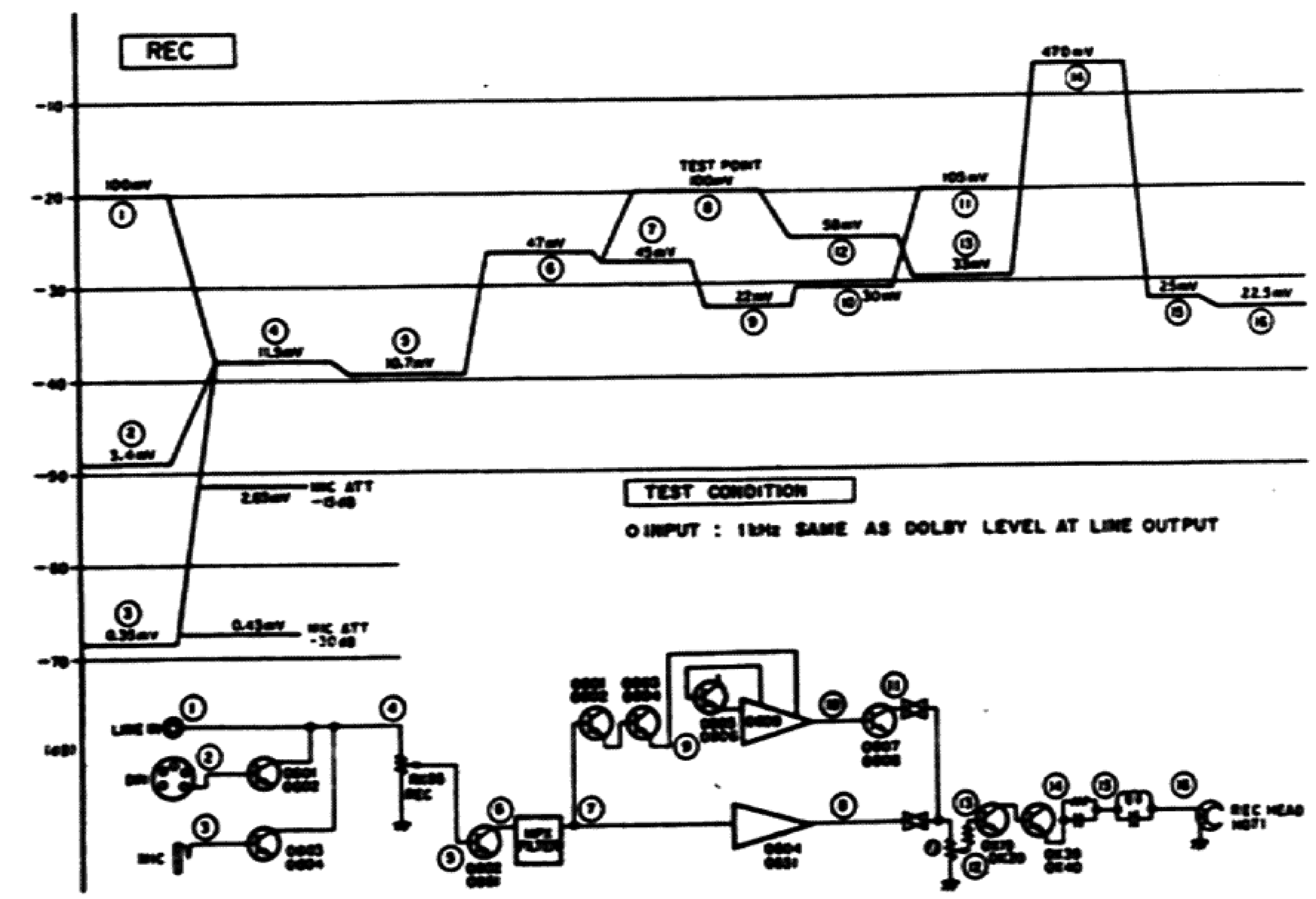
PJ01



6.3 Block/Level Diagrams

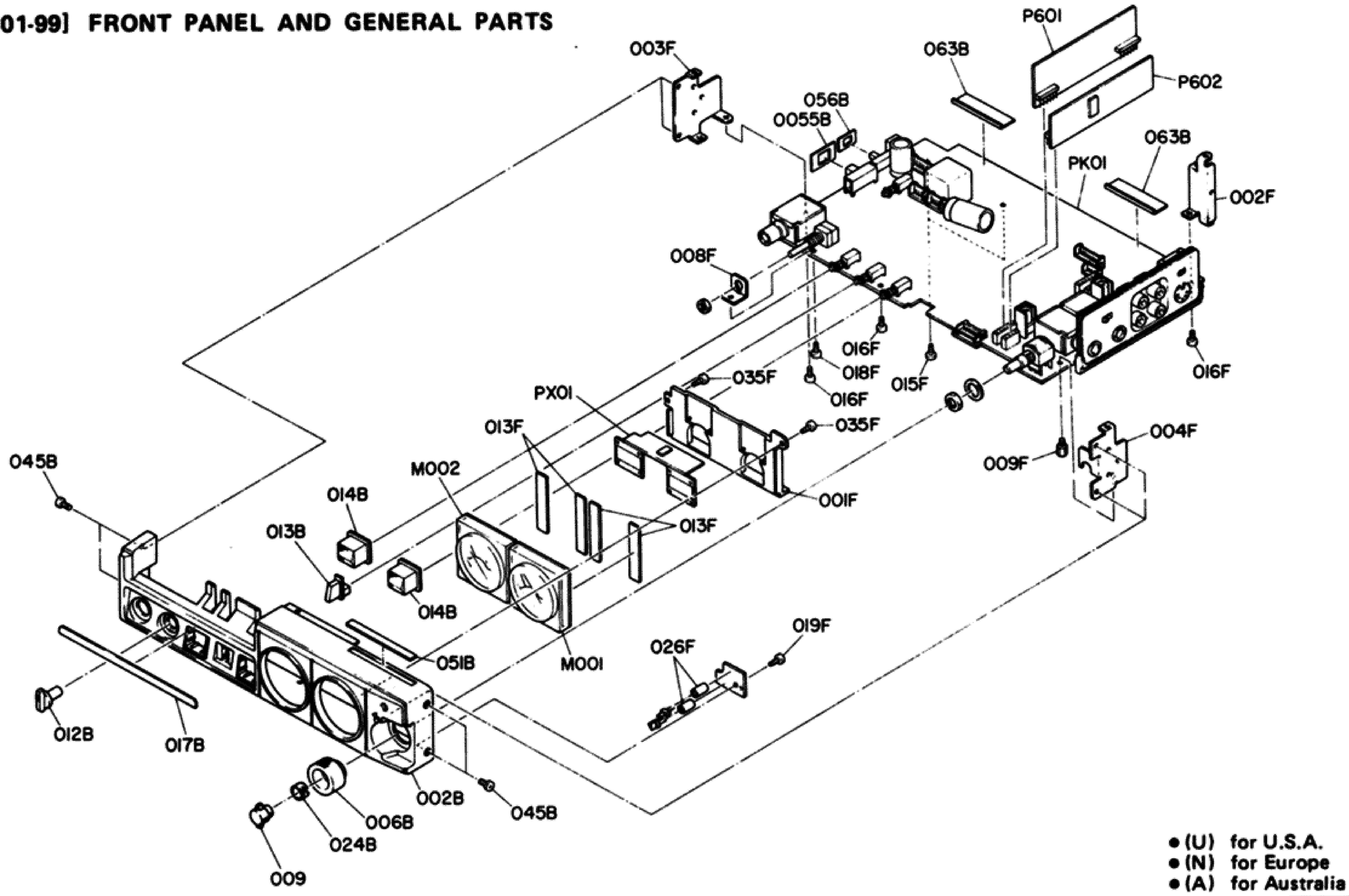






7. EXPLODED VIEW AND PARTS LIST

[C01-99] FRONT PANEL AND GENERAL PARTS

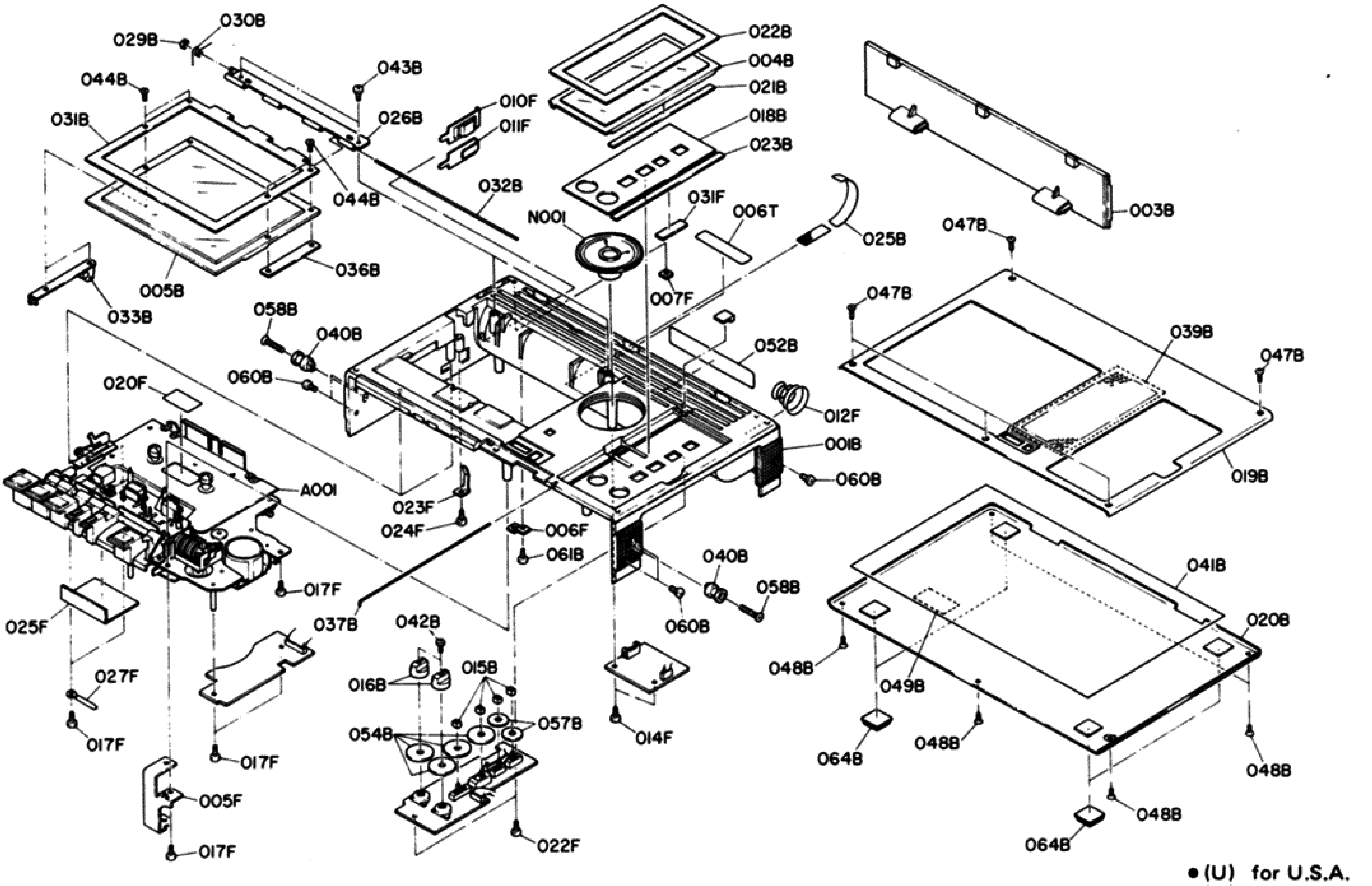


● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
002B	1			153T064050	Case Front
002B		1	1	153T064030	Case Front
006B	1	1	1	153T154500	Knob Assy Rec Volume (L)
009B	1	1	1	153T154510	Knob Assy Rec Volume (R)
012B	1	1	1	153T154030	Knob Monitor Volume
013B	1	1	1	153T154040	Knob Batt./Light
014B	2	2	2	153T154050	Knob Monitor/Limiter
017B	1	1	1	153T265040	Indicator
024B	1	1	1	153T005010	Clamper
045B	4	4	4	51102606S0	B.H.M. Screw B2.6 x 6
051B	1	1	1	153T251010	Badge
055B	1	1	1	153T303030	Mask
056B	1	1	1	153T303040	Mask
063B	2	2	2	153T303070	Mask

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
001F	1	1	1	153T104020	Retainer Level Meter
002F	1	1	1	153T160050	Bracket
003F	1	1	1	153T160060	Bracket
004F	1	1	1	153T160070	Bracket
008F	1	1	1	153T104070	Retainer
009F	1	1	1	153T113010	Stud
013F	4	4	4	153T118010	Spacer
015F	2	2	2	51302608B0	P.H. Tapped Screw P2.6 x 8
016F	3	3	3	51572606B0	P. Tapped Screw P2.6 x 6
018F	1	1	1	51572604B0	P. Tapped Screw P2.6 x 4
019F	1	1	1	51300306B0	P.H. Tapped Screw P3 x 6
026F	2	2	2	153T055020	Collar
035F	2	2	2	51300308B0	P.H. Tapped Screw P3 x 8
M001	1	1	1	IM31040010	V.U. Meter L
M002	1	1	1	IM31040020	V.U. Meter R

[C02-99] MAIN CASE AND GENERAL PARTS

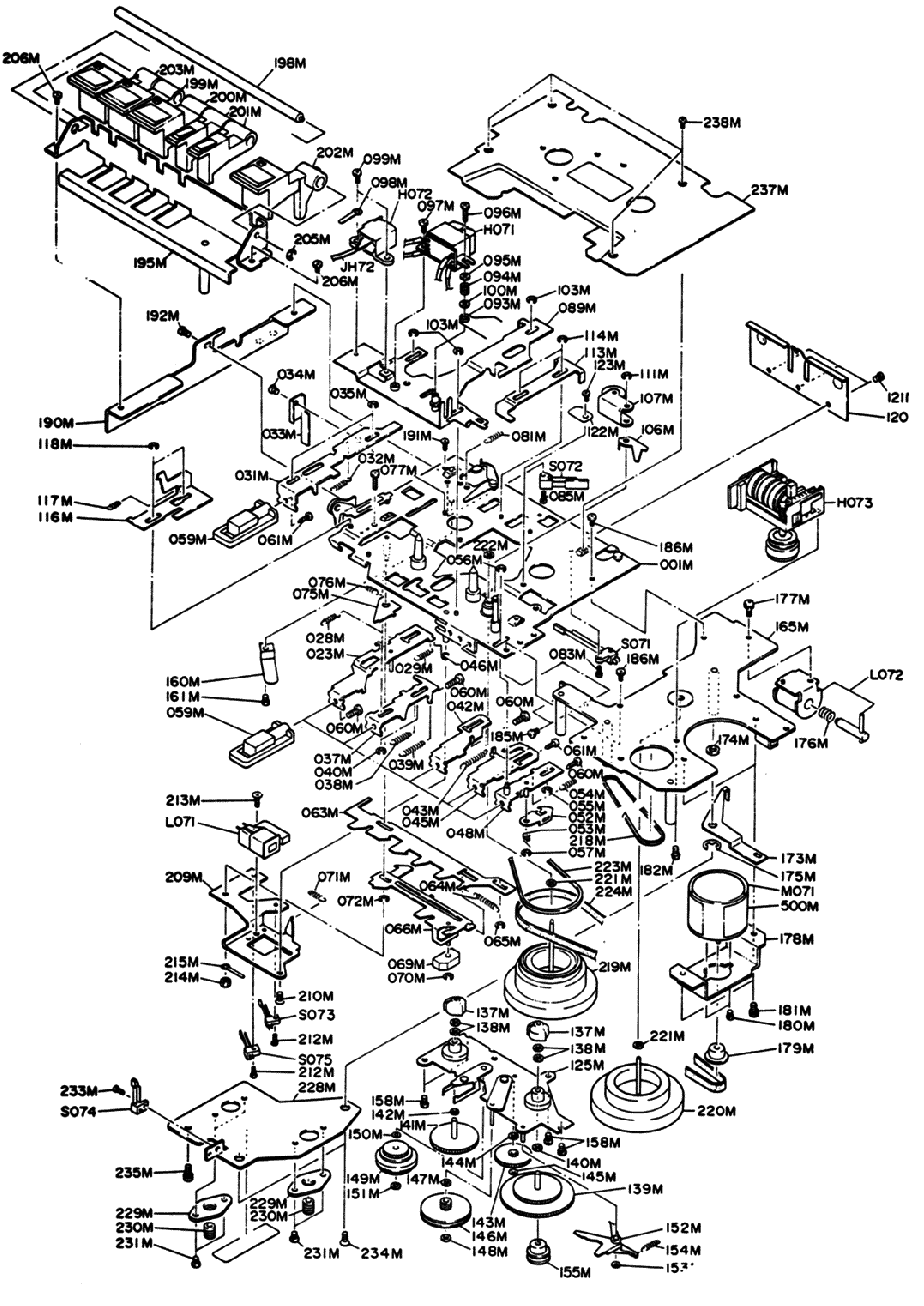


• (U) for U.S.A.
• (N) for Europe
• (A) for Australia


REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
001B	1			153T064040	Case Top
001B		1	1	153T064010	Case Top
003B	1			153T257050	Lid Battery
003B		1	1	153T257010	Lid Battery
004B	1	1	1	153T257020	Lid Control
005B	1	1	1	153T257030	Lid Cassette
015B	4	4	4	153T154060	Knob Slide Switch
016B	2	2	2	153T154070	Knob Pitch/Bias Fine
018B	1	1	1	153T265030	Indicator
019B	1			153T053060	Cover Top
019B		1	1	153T053050	Cover Top
020B	1			153T053070	Cover Bottom
020B		1	1	153T053040	Cover Bottom
021B	1	1	1	153T305010	Magnet
022B	1	1	1	153T063010	Escutcheon
023B	1	1	1	153T060010	Clinger
025B	1	1	1	153T007010	Strip
026B	1	1	1	153T153500	Hinge Assembly
029B	1	1	1	64002500A0	RG Ring, E
030B	1	1	1	153T115090	Spring
031B	1	1	1	153T153020	Hinge Cassette Cover
032B	1	1	1	153T112380	Shaft
033B	1	1	1	153T104500	Retainer Assembly
036B	1	1	1	153T104040	Retainer
037B	1	1	1	153T112370	Shaft Control Cover
039B	1	1	1	153T107010	Sheet Top Cover
040B	2	2	2	153T055010	Collar Top Case
041B	1	1	1	153T120010	Insulator Bottom Cover
042B	2	2	2	51061704S0	P.H.M. Screw P1.7 x 4
043B	2	2	2	51302606U0	P.H. Tapped Screw P2.6 x 6
044B	4	4	4	51840204S0	F.H.M. Screw F2 x 4
047B	5	5	5	51842607S0	F.H.M. Screw F2.6 x 7
048B	5	5	5	51842605S0	F.H.M. Screw F2.6 x 5

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
049B	1	1	1	4581861010	Label
052B	1	1	1	153T861010	Label
054B	4	4	4	153T303020	Mask
057B	2	2	2	153T303060	Mask
058B	2	2	2	51040318S0	F.H.M. Screw F3 x 1.8
060B	5	5	5	51102606S0	B.H.M. Screw B2.6 x 6
061B	1	1	1	51300306B0	P.H. Tapped Screw P3
064B	4	4	4	153T057000	Leg Cover
005F	1	1	1	153T160080	Bracket
006F	1	1	1	153T104050	Retainer
007F	1	1	1	153T104060	Retainer
010F	1	1	1	153T129010	Terminal
011F	1	1	1	153T129020	Terminal
012F	1	1	1	YL11010090	Terminal (−)
014F	2	2	2	51062605A0	P.H.M. Screw P2.6 x 5
017F	8	8	8	51300308B0	P.H. Tapped Screw P3 x 8
020F	1	1	1	251T274010	Reflector
022F	2	2	2	51300306B0	P.H. Tapped Screw P3 x 6
023F	1	1	1	153T115100	Spring
024F	1	1	1	51300306B0	P.H. Tapped Screw P3 x 6
025F	1	1	1	153T303080	Mask
027F	2	2	2	4220005030	Clamper
031F	1	1	1	4123107070	Sheet
006T	1			2112265010	Indicator Serial No. Card
006T		1	1	2112265110	Indicator Serial No. Card
A001	1	1	1	154T304500	Mechanism Assembly
N001	1	1	1	QK00408030	Speaker 8Ω

[P01-99] PARTS ASSEMBLED ON THE CHASSIS



10. SCHEMATIC DIAGRAM



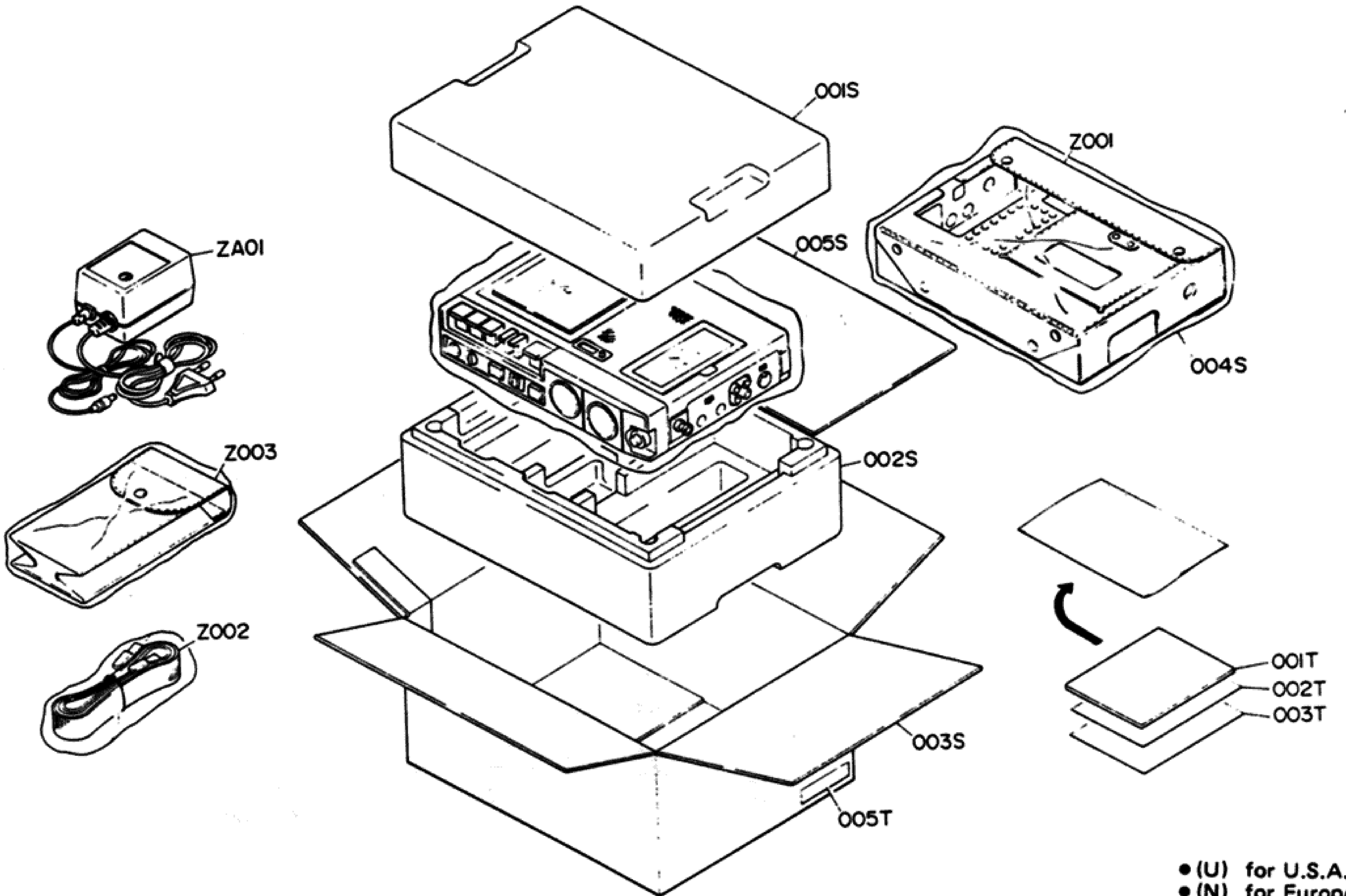
NOTE ON SAFETY:

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol
Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

Components and wiring are subject to change for modification without notice.

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
001M	1	1	1	153T105500	Main Chassis Ass'y
023M	1	1	1	153T354500	Lever Stop Ass'y
028M	1	1	1	251T11510R	Spring Stop Eject Selector
029M	1	1	1	242T11512R	Spring Stop Lever
031M	1	1	1	153T354020	Lever Rec
032M	1	1	1	242T11512R	Spring Rec Lever
033M	1	1	1	153T125010	Joint Spring Rec Switch
034M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2
035M	2	2	2	64001500LR	RG Ring, E Rec Lever
037M	1	1	1	251T35401R	Lever Play
038M	1	1	1	251T11511R	Spring Play Lever
039M	1	1	1	251T11512R	Spring Play Lever Head Plate
040M	2	2	2	64001500LR	RG Ring, Play Lever
042M	1	1	1	251T35402R	Lever REW
043M	1	1	1	251T11513R	Spring REW Lever
045M	1	1	1	251T35403R	Lever FF
046M	1	1	1	242T11516R	Spring FF Lever
048M	1	1	1	153T354510	Lever Pause Ass'y
052M	1	1	1	153T002040	Arm Pause
053M	1	1	1	153T115060	Spring Pause Arm
054M	1	1	1	153T115070	Spring Pause Lever Ass'y
055M	1	1	1	64001500LR	RG Ring, Pause Lever Ass'y
056M	1	1	1	64000200LR	RG Ring, Pause Lever Ass'y
057M	1	1	1	64001500LR	RG Ring, Pause Arm
059M	6	6	6	153T354040	Lever Button Joint
060M	4	4	4	51401705PR	B.H. Tapped Screw B1.7 x 5
061M	2	2	2	51381705PR	P.H. Tapped Screw P1.7 x 5
063M	1	1	1	153T054010	Cam Play/Rec Lock
064M	1	1	1	153T115150	Spring Play/Rec Lock Cam
065M	1	1	1	64001500LR	RG Ring, Play/Rec Lock Cam
066M	1	1	1	153T054500	Cam FF/REW Lock Cam Ass'y
069M	1	1	1	251T06010R	Clinger Magnet Coil
070M	1	1	1	64001500LR	RG Ring, Clinger
071M	1	1	1	251T11514R	Spring FF/REW Lock Cam
072M	1	1	1	64000200LR	RG Ring, Cam
075M	1	1	1	251T00210R	Arm Anti After Rec
076M	1	1	1	251T11515R	Spring Anti After Rec
077M	1	1	1	518217050R	P.H.M. Screw P1.7 x 5
080M	1	1	1	242T11518R	Spring Cue/Rev Arm
081M	1	1	1	242T11512R	Spring Rec Safty Arm
083M	1	1	1	51821703S0	P.H.M. Screw P1.7 x 3
085M	1	1	1	51820235SR	P.H.M. Screw P2 x 3.5
089M	1	1	1	154T105500	Chassis Head Plate Ass'y
093M	1	1	1	154T115010	Spring Pinch Roller
094M	1	1	1	154T115020	Spring Azimuth
095M	1	1	1	54020201S0	Flat Washer, P
096M	1	1	1	51100205S0	B.H.M. Screw B2 x 5
097M	1	1	1	51100203S0	B.H.M. Screw B2 x 3
098M	1	1	1	251T00511R	Clamper Head Wire
099M	2	2	2	51100245S0	B.H.M. Screw B2 x 4.5
100M	1	1	1	153T012010	Washer Pinch Roller Spring
103M	3	3	3	64001500LR	RG Ring, Head Plate
106M	1	1	1	153T002010	Arm Pause
107M	1	1	1	153T255500	Pinch Roller Ass'y
111M	1	1	1	64001500LR	RG Ring, Pinch Roller Ass'y Install
113M	1	1	1	242T35416R	Lever Cue/Review
114M	2	2	2	64001500LR	RG Ring, Cue/Review Lever
116M	1	1	1	251T258010	Hook Cassette Door
117M	1	1	1	251T11517R	Spring Hook
118M	2	2	2	64001500LR	RG Ring, Hook
120M	1	1	1	153T115010	Spring Cassette Back
121M	3	3	3	51821702S0	P.H.M. Screw P1.7 x 2
122M	1	1	1	251T00510R	Clamper Take Up Lever
123M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2
125M	1	1	1	153T105530	Chassis Reel Base Ass'y
137M	2	2	2	242T00410R	Table Reel Cap
138M	4	4	4	59020405G9	Washer Under Reel Cap
139M	1	1	1	153T058010	Gear Take Up Clutch W/Shaft
140M	1	1	1	59020402G9	Washer Under Take Up Clutch
141M	1	1	1	153T058020	Gear Supply Gear W/Shaft
142M	1	1	1	59020402G9	Washer Under Supply Gear
143M	1	1	1	242T05811R	Gear FF
144M	1	1	1	59020402G9	Washer Under FF Gear
145M	1	1	1	251T11411R	Stopper
146M	1	1	1	242T26210R	Pulley Take Up
147M	1	1	1	59163202G9	Washer Under Take Up Pulley
148M	1	1	1	59123502G9	Washer Stop Ws. Take Up Pulley
149M	1	1	1	242T26211R	Pulley FF/REW Idler
150M	1	1	1	59163202G9	Washer Under F/R Idler
151M	1	1	1	59123202G9	Washer Stop Ws. F/R Idler
152M	1	1	1	242T00210R	Arm Auto Stop (Plastics)
153M	1	1	1	251T11412R	Stopper Stop Ws. Auto Arm
154M	1	1	1	153T115040	Spring Auto Stop Arm
155M	1	1	1	153T262020	Pulley Counter
158M	4	4	4	51821702S0	P.H.M. Screw P1.7 x 2
160M	1	1	1	153T115020	Spring Back Tention
161M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2
165M	1	1	1	153T105520	Chassis Sub Ass'y
173M	1	1	1	153T121010	Link Play Auto Stop
174M	1	1	1	59050805G9	Washer Auto Stop Link
175M	1	1	1	64000400LR	RG Ring, Auto Stop Link
176M	1	1	1	153T115030	Spring Solenoid Coil
177M	1	1	1	51822603S0	P.H.M. Screw P2.6 x 3
178M	1	1	1	153T160020	Bracket Motor
179M	1	1	1	153T262010	Pulley Motor
180M	2	2	2	51821725SR	P.H.M. Screw P1.7 x 2.5
181M	2	2	2	51442604A0	L. Washer
182M	2	2	2	51302604B0	P.H. Tapped Screw P2.6 x 4
185M	2	2	2	51821703S0	P.H.M. Screw P1.7 x 3
186M	2	2	2	51820203S0	P.H.M. Screw P2 x 3
190M	1	1	1	153T160040	Bracket Button Holder
191M	1	1	1	51820203S0	P.H.M. Screw P2 x 3
192M	1	1	1	51821703S0	P.H.M. Screw P1.7 x 3
195M	1	1	1	153T271500	Holder Button Ass'y
198M	1	1	1	153T112130	Shaft Button
199M	1	1	1	153T270010	Button Stop/Eject
200M	1	1	1	153T270020	Button Play
201M	2	2	2	153T270030	Button FF And REW
202M	1	1	1	153T270040	Button Pause
203M	1	1	1	153T270050	Button Rec
205M	1	1	1	64000200LR	RG Ring, Button Shaft
206M	2	2	2	51820203S0	P.H.M. Screw P2 x 3
209M	1	1	1	153T160010	Bracket Coil And Switch
210M	1	1	1	51040208A0	F.H.M. Screw F2 x 8
212M	2	2	2	51821404SR	P.H.M. Screw P1.4 x 4
213M	1	1	1	51041703SR	F.H.M. Screw F1.7 x 3
214M	1	1	1	53111703ER	Hexagon Nut Coil And Switch
215M	1	1	1	251T00511R	Clamper Switch Wire Bracket
218M	1	1	1	153T264020	Belt Counter
219M	1	1	1	153T273010	Flywheel Main
220M	1	1	1	153T273020	Flywheel Dummy
221M	2	2	2	59163202G9	Washer Under Flywheel
222M	1	1	1	59143502GR	Washer Oil Defense
223M	1	1	1	242T26412R	Belt Drive
224M	1	1	1	153T264010	Belt Main
228M	1	1	1	153T160030	Bracket Flywheel
229M	2	2	2	153T104010	Retainer Adjuster
230M	2	2	2	153T164010	Adjuster Fly Thrust Adjust
231M	4	4	4	51820203SR	P.H.M. Screw P2 x 3
233M	1	1	1	51821404SR	P.H.M. Screw P1.4 x 4
234M	2	2	2	51042604S0	F.H.M. Screw F2.6 x 4
235M	1	1	1	51442604A0	L. Washer
237M	1	1	1	153T053010	Cover Mecha
238M	4	4	4	51821702SR	P.H.M. Screw P1.7 x 2
500M	3	3	3	153T109010	Shield Slid Motor
H071	1	1	1	LH82162010	Rec/Play Head Conbination R/P Head
H072	1	1	1	LH31000570	Erase Head
H073	1	1	1	153T052010	Counter
L071	1	1	1	ME0014004R	Solenoid Coil REW
L072	1	1	1	ME10180010	Solenoid Coil Auto Stop
M071	1	1	1	MM00450020	D.C. Motor
S071	1	1	1	SM0101097R	Mini Switch Motor
S072	1	1	1	SM0101114R	Mini Switch FF/REW
S073	1	1	1	SM0101115R	Mini Switch Play
S074	1	1	1	SM0101115R	Mini Switch Pause
S075	1	1	1	SM0101115R	Mini Switch Stop

[H01-99] PACKING MATERIALS



● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
001S	1	1	1	153T809010	Cushion Top
002S	1	1	1	153T809020	Cushion Bottom
003S	1			153T801020	Packing Case
003S		1	1	154T801010	Packing Case
004S	1	1	1	9013025010	Polyethy Bag
005S	1	1	1	153T803010	Partitioner
001T		1	1	153T851310	User Manual
001T	1			153T851210	User Manual
002T		1	1	154T851320	User Manual Spec Flysheet
002T	1			154T851220	User Manual Spec Flysheet
003T			1	9631000090	Warranty Card
003T		1		154T856010	Circuit Diagram
003T	1			2818854020	Warranty Card
005T	1			9526019020	Serial No. Card
005T		2		9526019060	Serial No. Card
005T			3	9526019030	Serial No. Card

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
Z001	1	1	1	153T831010	Carrying Case
Z002	1	1	1	153T156010	Strap
Z003	1	1	1	153T831020	Carrying Case
ZA01			1	AA90005020	A.C. Adaptor
ZA01		1		AA90005010	A.C. Adaptor
ZA01	1			AA12005010	A.C. Adaptor

8. ELECTRICAL PARTS LIST

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION		
	U	N	A				
					PK01-AUDIO/MAIN CIRCUIT BOARD		
RK01	1	1	1	WB154T1510	P.W. Board Audio/Main		
	1	1	1	ZZ154T1510	P.W. Board Assembly		
					PK01-CAPACITORS		
C701	1	1	1	EJ22405010	Elect	0.22μF	50V
C702	1	1	1	EJ22405010	Elect	0.22μF	50V
C703	1	1	1	DK46102300	Ceramic	1000pF	±10%
C704	1	1	1	DK46102300	Ceramic	1000pF	±10%
C705	1	1	1	EJ47601010	Elect	47μF	10V
C706	1	1	1	EJ47601010	Elect	47μF	10V
C707	1	1	1	DK46153300	Ceramic	0.015μF	±10%
C708	1	1	1	DK46153300	Ceramic	0.015μF	±10%
C709	1	1	1	EJ47601010	Elect	47μF	10V
C710	1	1	1	EJ47601010	Elect	47μF	10V
C711	1	1	1	DF15104350	Film	0.1μF	±5%
C712	1	1	1	DF15104350	Film	0.1μF	±5%
C713	1	1	1	EJ22700610	Elect	220μF	6.3V
C714	1	1	1	EJ10700610	Elect	100μF	6.3V
C715	1	1	1	EJ10700610	Elect	100μF	6.3V
C716	1	1	1	EJ10700610	Elect	100μF	6.3V
C717	1	1	1	EJ22700610	Elect	220μF	6.3V
C718	1	1	1	EJ10601610	Elect	10μF	16V
C801	1	1	1	DF15334350	Film	0.33μF	±5%
C802	1	1	1	DF15334350	Film	0.33μF	±5%
C803	1	1	1	DF15334350	Film	0.33μF	±5%
C804	1	1	1	DF15334350	Film	0.33μF	±5%
C805	1	1	1	DF15334350	Film	0.33μF	±5%
C806	1	1	1	DF15334350	Film	0.33μF	±5%
C807	1	1	1	DF15332350	Film	3300pF	±5%
C808	1	1	1	DF15332350	Film	3300pF	±5%
C809	1	1	1	DF15332350	Film	3300pF	±5%
C810	1	1	1	DF15332350	Film	3300pF	±5%
C811	1	1	1	DD45331300	Ceramic	330pF	±5%
C812	1	1	1	DD45331300	Ceramic	330pF	±5%
C813	1	1	1	DF15104350	Film	0.1μF	±5%
C814	1	1	1	DF15104350	Film	0.1μF	±5%
C815	1	1	1	DF15334350	Film	0.33μF	±5%
C816	1	1	1	DF15334350	Film	0.33μF	±5%
C817	1	1	1	DF15333350	Film	0.033μF	±5%
C818	1	1	1	DF15333350	Film	0.033μF	±5%
C819	1	1	1	EJ10601610	Elect	10μF	16V
C820	1	1	1	EJ10601610	Elect	10μF	16V
C821	1	1	1	EV68401670	Elect	0.68μF	16V
C822	1	1	1	EV68401670	Elect	0.68μF	16V
C823	1	1	1	DF15223350	Film	0.022μF	±5%
C824	1	1	1	DF15223350	Film	0.022μF	±5%
C825	1	1	1	DF15472350	Film	4700pF	±5%
C826	1	1	1	DF15472350	Film	4700pF	±5%
C827	1	1	1	DF15104350	Film	0.1μF	±5%
C828	1	1	1	DF15104350	Film	0.1μF	±5%
C829	1	1	1	EJ47600610	Elect	47μF	6.3V
C830	1	1	1	EJ47600610	Elect	47μF	6.3V
C831	1	1	1	DD45331300	Ceramic	330pF	±5%
C832	1	1	1	DD45331300	Ceramic	330pF	±5%
C833	1	1	1	EJ10601610	Elect	10μF	16V
C834	1	1	1	EJ10505010	Elect	1μF	50V
C835	1	1	1	DF15222350	Film	2200pF	±5%
C836	1	1	1	DF15222350	Film	2200pF	±5%
C837	1	1	1	EJ47502510	Elect	4.7μF	25V
C838	1	1	1	EJ47502510	Elect	4.7μF	25V
C839	1	1	1	EJ47502510	Elect	4.7μF	25V
C840	1	1	1	EJ47502510	Elect	4.7μF	25V
C841	1	1	1	EJ22700610	Elect	220μF	6.3V
C901	1	1	1	DF15104350	Film	0.1μF	±5%
C902	1	1	1	DF15104350	Film	0.1μF	±5%
C903	1	1	1	DF15104350	Film	0.1μF	±5%
C904	1	1	1	DF15104350	Film	0.1μF	±5%
C905	1	1	1	DF15332350	Film	3300pF	±5%
C906	1	1	1	DF15332350	Film	3300pF	±5%
C907	1	1	1	DF15332350	Film	3300pF	±5%
C908	1	1	1	DF15332350	Film	3300pF	±5%
C909	1	1	1	DD45331300	Ceramic	330pF	±5%
C910	1	1	1	DD45331300	Ceramic	330pF	±5%
C911	1	1	1	DF15334350	Film	0.33μF	±5%
C912	1	1	1	DF15334350	Film	0.33μF	±5%
C913	1	1	1	DF15333350	Film	0.033μF	±5%
C914	1	1	1	DF15333350	Film	0.033μF	±5%
C915	1	1	1	EJ10601610	Elect	10μF	16V
C916	1	1	1	EJ10601610	Elect	10μF	16V
C917	1	1	1	EV68401670	Elect	0.68μF	16V
C918	1	1	1	EV68401670	Elect	0.68μF	16V
C919	1	1	1	DF15471350	Film	470pF	±5%
C920	1	1	1	DF15471350	Film	470pF	±5%
C921	1	1	1	EJ47600610	Elect	47μF	6.3V
C922	1	1	1	EJ47600610	Elect	47μF	6.3V
C923	1	1	1	DF15472350	Film	4700pF	±5%
C924	1	1	1	DF15472350	Film	4700pF	±5%
C925	1	1	1	DF15223350	Film	0.022μF	±5%
C926	1	1	1	DF15223350	Film	0.022μF	±5%
C927	1	1	1	EJ10601610	Elect	10μF	16V
C928	1	1	1	EJ10505010	Elect	1μF	50V
C929	1	1	1	DF15472350	Film	4700pF	±5%
C930	1	1	1	DF15472350	Film	4700pF	±5%
C931	1	1	1	EJ47502510	Elect	4.7μF	25V
C932	1	1	1	EJ47502510	Elect	4.7μF	25V
C933	1	1	1	EJ47502510	Elect	4.7μF	25V
C934	1	1	1	EJ47502510	Elect	4.7μF	25V
C935	1	1	1	EJ47502510	Elect	4.7μF	25V
C936	1	1	1	EJ47502510	Elect	4.7μF	25V
C937	1	1	1	EJ10701010	Elect	100μF	10V
C939	1	1	1	EJ22505010	Elect	2.2μF	50V
C940	1	1	1	EJ22505010	Elect	2.2μF	250V
CG01	1	1	1	EJ10505010	Elect	1μF	50V
CG02	1	1	1	EJ10505010	Elect	1μF	50V
CG03	1	1	1	EJ10505010	Elect	1μF	50V
CG04	1	1	1	EJ10505010	Elect	1μF	50V
CG05	1	1	1	DK46102300	Ceramic	1000pF	±10%
CG06	1	1	1	DK46102300	Ceramic	1000pF	±10%
CG07	1	1	1	EJ10505010	Elect	1μF	50V
CG08	1	1	1	EJ10505010	Elect	1μF	50V
CG09	1	1	1	DK46102300	Ceramic	1000pF	±10%
CG10	1	1	1	DK46102300	Ceramic	1000pF	±10%
CG11	1	1	1	EJ47601010	Elect	47μF	10V
CG12	1	1	1	EJ47601010	Elect	47μF	10V
CG13	1	1	1	EJ10505010	Elect	1μF	50V
CG14	1	1	1	EJ10505010	Elect	1μF	50V
CG15	1	1	1	EJ22601610	Elect	22μF	16V
CG16	1	1	1	EJ22601610	Elect	22μF	16V
CG21	1	1	1	DK46103300	Ceramic	0.01μF	±10%
CG51	1	1	1	EJ47502510	Elect	4.7μF	25V
CG53	1	1	1	DD45271300	Ceramic	270pF	±5%
CG54	1	1	1	EJ22505010	Elect	2.2μF	50V
CG61	1	1	1	EJ47502510	Elect	4.7μF	25V
CG62	1	1	1	EJ22505010	Elect	2.2μF	50V
CG63	1	1	1	DK46562300	Ceramic	5600pF	±10%
CG64	1	1	1	EJ10701010	Elect	100μF	10V
CG65	1	1	1	EJ22505010	Elect	2.2μF	50V
CG66	1	1	1	EJ22505010	Elect	2.2μF	50V

● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
CK01	1	1	1	DF15153350	Film 0.015μF ±5%
CK02	1	1	1	DF15153350	Film 0.015μF ±5%
CK03	1	1	1	EJ47502510	Elect 4.7μF 25V
CK04	1	1	1	EJ47502510	Elect 4.7μF 25V
CK05	1	1	1	DK46102300	Ceramic 1000pF ±10%
CK06	1	1	1	DK46102300	Ceramic 1000pF ±10%
CK07	1	1	1	EJ47502510	Elect 4.7μF 25V
CK08	1	1	1	EJ47502510	Elect 4.7μF 25V
CK09	1	1	1	EJ10601610	Elect 10μF 16V
CK10	1	1	1	EJ10601610	Elect 10μF 16V
CK11	1	1	1	EJ47502510	Elect 4.7μF 25V
CK12	1	1	1	EJ47502510	Elect 4.7μF 25V
CK13	1	1	1	EJ47405010	Elect 0.47μF 50V
CK14	1	1	1	EJ47405010	Elect 0.47μF 50V
CK15	1	1	1	EJ22405010	Elect 0.22μF 50V
CK16	1	1	1	EJ22405010	Elect 0.22μF 50V
CK17	1	1	1	EJ47502510	Elect 4.7μF 25V
CK18	1	1	1	EJ47502510	Elect 4.7μF 25V
CK19	1	1	1	EJ47502510	Elect 4.7μF 25V
CK20	1	1	1	EJ47502510	Elect 4.7μF 25V
CK21	1	1	1	EJ47502510	Elect 4.7μF 25V
CK22	1	1	1	EJ47502510	Elect 4.7μF 25V
CK23	1	1	1	DF15562350	Film 5600pF ±5%
CK24	1	1	1	DF15562350	Film 5600pF ±5%
CK25	1	1	1	DF15103350	Film 0.01μF ±5%
CK26	1	1	1	DF15103350	Film 0.01μF ±5%
CK27	1	1	1	DF15682350	Film 6800pF ±5%
CK28	1	1	1	DF15682350	Film 6800pF ±5%
CK29	1	1	1	DF15392350	Film 3900pF ±5%
CK30	1	1	1	DF15392350	Film 3900pF ±5%
CK31	1	1	1	DF15152350	Film 0.0015μF ±5%
CK32	1	1	1	DF15152350	Film 0.0015μF ±5%
CK33	1	1	1	DD46102300	Ceramic 1000pF ±10%
CK34	1	1	1	DD46102300	Ceramic 1000pF ±10%
CK35	1	1	1	EJ47502510	Elect 4.7μF 25V
CK36	1	1	1	EJ47502510	Elect 4.7μF 25V
CK37	1	1	1	EJ10601610	Elect 10μF 16V
CK38	1	1	1	EJ10601610	Elect 10μF 16V
CK39	1	1	1	EJ10601610	Elect 10μF 16V
CK40	1	1	1	EJ10601610	Elect 10μF 16V
CK43	1	1	1	DK46102300	Ceramic 1000pF ±10%
CK44	1	1	1	EJ10601610	Elect 10μF 16V
CK45	1	1	1	EJ10701010	Elect 100μF 10V
CK46	1	1	1	DK46103300	Ceramic 0.01μF ±10%
CK47	1	1	1	EJ22505010	Elect 2.2μF 50V
CK48	1	1	1	EJ22505010	Elect 2.2μF 50V
CK49	1	1	1	EJ22505010	Elect 2.2μF 50V
CK50	1	1	1	EJ22505010	Elect 2.2μF 50V
CK51	1	1	1	EA10701610	Elect 100μF 16V
	1	1	1		
CL01	1	1	1	EJ10701010	Elect 100μF 10V
CL02	1	1	1	DF15472350	Film 4700pF ±5%
CL03	1	1	1	DF15103350	Film 0.01μF ±5%
CL04	1	1	1	DF15103350	Film 0.01μF ±5%
CL05	1	1	1	DF15334350	Film 0.33μF ±5%
CL06	1	1	1	DF15474350	Film 0.47μF ±5%
CL07	1	1	1	DD45221300	Ceramic 220pF ±5%
CL08	1	1	1	DD45221300	Ceramic 220pF ±5%
CL09	1	1	1	DF15123550	Film 0.012μF ±5%
⚠CL51	1	1	1	EA22801010	Elect 2200μF 10V
⚠CL52	1	1	1	EA22801610	Elect 2200μF 16V
CL53	1	1	1	EJ47601610	Elect 47μF 16V
CL54	1	1	1	EJ47600410	Elect 47μF 4V
CL55	1	1	1	EJ10701010	Elect 100μF 10V
CU01	1	1	1	EA10800610	Elect 1000μF 6.3V
CU02	1	1	1	EJ47502510	Elect 4.7μF 25V
CU04	1	1	1	DF15104350	Film 0.1μF ±5%
CU05	1	1	1	EJ22505010	Elect 2.2μF 50V

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
					PK01-RESISTORS (All Resistors are ±5% & 1/8W Chip)
R602	1	1	1	RI05122180	1.2kΩ
R701	1	1	1	RI05473180	47kΩ
R702	1	1	1	RI05473180	47kΩ
R703	1	1	1	RI05151180	150Ω
R704	1	1	1	RI05151180	150Ω
R705	1	1	1	RI05330180	33Ω
R706	1	1	1	RI05330180	33Ω
R707	1	1	1	RM01030240	10kΩ Variable
R709	1	1	1	RI05333180	33kΩ
R710	1	1	1	RI05333180	33kΩ
R711	1	1	1	RI05151180	150Ω
R712	1	1	1	RI05224180	220kΩ
R713	1	1	1	RI05102180	1kΩ
R714	1	1	1	RI05102180	1kΩ
R715	1	1	1	RI05472180	4.7kΩ
R801	1	1	1	RI05224180	220kΩ
R802	1	1	1	RI05224180	220kΩ
R803	1	1	1	RI05122180	1.2kΩ
R804	1	1	1	R105122180	1.2kΩ
R805	1	1	1	RI05393180	39kΩ
R806	1	1	1	RI05393180	39kΩ
R807	1	1	1	RI05563180	56kΩ
R808	1	1	1	RI05563180	56kΩ
R809	1	1	1	RI05124180	120kΩ
R810	1	1	1	RI05124180	120kΩ
R811	1	1	1	RI05103180	10kΩ
R812	1	1	1	RI05103180	10kΩ
R813	1	1	1	RI05332180	3.3kΩ
R814	1	1	1	RI05332180	3.3kΩ
R815	1	1	1	RI05224180	220kΩ
R816	1	1	1	RI05224180	220kΩ
R817	1	1	1	RI05472180	4.7kΩ
R818	1	1	1	RI05472180	4.7kΩ
R819	1	1	1	RI05153180	15kΩ
R820	1	1	1	RI05153180	15kΩ
R821	1	1	1	RI05153180	15kΩ
R822	1	1	1	RI05153180	15kΩ
R823	1	1	1	RI05154180	150kΩ
R824	1	1	1	RI05154180	150kΩ
R825	1	1	1	RI05333180	33kΩ
R826	1	1	1	RI05333180	33kΩ
R827	1	1	1	RI05332180	3.3kΩ
R828	1	1	1	RI05332180	3.3kΩ
R829	1	1	1	RI05103180	10kΩ
R830	1	1	1	RI05103180	10kΩ
R831	1	1	1	RI05102180	1kΩ
R832	1	1	1	RI05102180	1kΩ
R833	1	1	1	RI05153180	15kΩ
R834	1	1	1	RI05153180	15kΩ
R835	1	1	1	RI05472180	4.7kΩ
R836	1	1	1	RI05472180	4.7kΩ
R837	1	1	1	RI05151180	150Ω
R838	1	1	1	RI05151180	150Ω
R839	1	1	1	RI05153180	15kΩ
R840	1	1	1	RI05153180	15kΩ
R841	1	1	1	RI05472180	4.7kΩ
R842	1	1	1	RI05472180	4.7kΩ
R843	1	1	1	RI05122180	1.2kΩ
R844	1	1	1	RI05122180	1.2kΩ
R845	1	1	1	RI05104180	100kΩ
R846	1	1	1	RI05104180	100kΩ
R847	1	1	1	RI05684180	680kΩ
R848	1	1	1	RI05684180	680kΩ
R849	1	1	1	RI05103180	10kΩ
R850	1	1	1	RI05103180	10kΩ

● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION	
R851	1	1	1	RI05272180	2.7kΩ	
R852	1	1	1	RI05272180	2.7kΩ	
R855	1	1	1	RA02220600	2.2kΩ	Trimming
R856	1	1	1	RI05102180	1kΩ	
R901	1	1	1	RI05684180	680kΩ	
R902	1	1	1	RI05684180	680kΩ	
R905	1	1	1	RI05272180	2.7kΩ	
R906	1	1	1	RI05272180	2.7kΩ	
R907	1	1	1	RI05154180	150kΩ	
R908	1	1	1	RI05154180	150kΩ	
R909	1	1	1	RI05224180	220kΩ	
R910	1	1	1	RI05224180	220kΩ	
R911	1	1	1	RI05472180	4.7kΩ	
R912	1	1	1	RI05472180	4.7kΩ	
R913	1	1	1	RI05153180	15kΩ	
R914	1	1	1	RI05153180	15kΩ	
R915	1	1	1	RI05153180	15kΩ	
R916	1	1	1	RI05153180	15kΩ	
R917	1	1	1	RI05332180	3.3kΩ	
R918	1	1	1	RI05332180	3.3kΩ	
R919	1	1	1	RI05103180	10kΩ	
R920	1	1	1	RI05103180	10kΩ	
R921	1	1	1	RI05102180	1kΩ	
R922	1	1	1	RI05102180	1kΩ	
R923	1	1	1	RI05153180	15kΩ	
R924	1	1	1	RI05153180	15kΩ	
R925	1	1	1	RI05472180	4.7kΩ	
R926	1	1	1	RI05472180	4.7kΩ	
R927	1	1	1	RI05153180	15kΩ	
R928	1	1	1	RI05153180	15kΩ	
R929	1	1	1	RI05151180	150Ω	
R930	1	1	1	RI05151180	150Ω	
R931	1	1	1	RI05472180	4.7kΩ	
R932	1	1	1	RI05472180	4.7kΩ	
R933	1	1	1	RI05331180	330Ω	
R934	1	1	1	RI05331180	330Ω	
R935	1	1	1	RI05684180	680kΩ	
R936	1	1	1	RI05684180	680kΩ	
R937	1	1	1	RI05124180	120kΩ	
R938	1	1	1	RI05124180	120kΩ	
R939	1	1	1	RI05102180	1kΩ	
R940	1	1	1	RI05102180	1kΩ	
R941	1	1	1	RI05682180	6.8kΩ	
R942	1	1	1	RI05682180	6.8kΩ	
R943	1	1	1	RI05104180	100kΩ	
R944	1	1	1	RI05104180	100kΩ	
R947	1	1	1	RA02220600	2.2kΩ	Trimming
R948	1	1	1	RI05102180	1kΩ	
R951	1	1	1	RI05333180	33kΩ	
R952	1	1	1	RI05333180	33kΩ	
R953	1	1	1	RI05104180	100kΩ	
R954	1	1	1	RI05104180	100kΩ	
R955	1	1	1	RI05333180	33kΩ	
R956	1	1	1	RI05333180	33kΩ	
R957	1	1	1	RI05152180	1.5kΩ	
RE01	1	1	1	RI05561180	560Ω	
RE03	1	1	1	RI05472180	4.7kΩ	
RE04	1	1	1	GD05472160	4.7kΩ	1/6W
RE05	1	1	1	RI05684180	680kΩ	
RE06	1	1	1	RI05124180	120kΩ	
RE11 ~ RE14	4	4	4	GD05684180	680kΩ	
RE15	1	1	1	GD05105180	1MΩ	
RE16	1	1	1	GD05105180	1MΩ	
RE17	1	1	1	GD05333180	33kΩ	
RE18	1	1	1	GD05560160	56Ω	1/6W
RE19	1	1	1	GD05334160	330kΩ	1/6W
RE20	1	1	1	GD05334160	330kΩ	1/6W

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION	
RG01	1	1	1	RI05102180	1kΩ	
RG02	1	1	1	RI05102180	1kΩ	
RG03	1	1	1	RI05154180	150kΩ	
RG04	1	1	1	RI05154180	150kΩ	
RG05	1	1	1	RI05275180	2.7MΩ	
RG06	1	1	1	RI05275180	2.7MΩ	
RG07	1	1	1	RI05684180	680kΩ	
RG08	1	1	1	RI05684180	680kΩ	
RG09	1	1	1	RI05221180	220Ω	
RG10	1	1	1	RI05221180	220Ω	
RG11	1	1	1	RI05562180	5.6kΩ	
RG12	1	1	1	RI05562180	5.6kΩ	
RG13	1	1	1	RI05102180	1.2kΩ	
RG14	1	1	1	RI05102180	1.2kΩ	
RG15	1	1	1	RI05103180	10kΩ	
RG16	1	1	1	RI05103180	10kΩ	
RG17	1	1	1	RI05184180	180kΩ	
RG18	1	1	1	RI05184180	180kΩ	
RG19	1	1	1	RI05474180	470kΩ	
RG20	1	1	1	RI05474180	470kΩ	
RG21	1	1	1	RI05153180	15kΩ	
RG22	1	1	1	RI05153180	15kΩ	
RG23	1	1	1	RI05682180	6.8kΩ	
RG24	1	1	1	RI05682180	6.8kΩ	
RG25	1	1	1	RI05151180	150Ω	
RG26	1	1	1	RI05151180	150Ω	
RG27	1	1	1	RI05122180	1.2kΩ	
RG28	1	1	1	RI05122180	1.2kΩ	
RG29	1	1	1	RI05823180	82kΩ	
RG30	1	1	1	RI05823180	82kΩ	
RG31	1	1	1	RI05104180	100kΩ	
RG34	1	1	1	RI05102180	1kΩ	
RG35	1	1	1	RI05104180	100kΩ	
RG36	1	1	1	RI05102180	1kΩ	
RG37	1	1	1	RI05153180	15kΩ	
RG38	1	1	1	RI05153180	15kΩ	
RG51	1	1	1	RI05224180	220kΩ	
RG52	1	1	1	RI05122180	1.2kΩ	
RG54	1	1	1	RI05100180	10Ω	
RG61	1	1	1	RI05684180	680kΩ	
RG62	1	1	1	RI05222180	2.2kΩ	
RG63	1	1	1	RI05271180	270Ω	
RG64	1	1	1	RI05103180	10kΩ	
RG65	1	1	1	RI05124180	120kΩ	
RG66	1	1	1	RI05104180	100kΩ	
RG67	1	1	1	RI05104180	100kΩ	
RG68	1	1	1	RI05000180	0Ω	
RK01	1	1	1	RI05392180	3.9kΩ	
RK02	1	1	1	RI05392180	3.9kΩ	
RK03	1	1	1	RA04730600	47kΩ	Trimming
RK04	1	1	1	RA04730600	47kΩ	Trimming
RK07	1	1	1	RI05101180	100Ω	
RK08	1	1	1	RI05101180	100Ω	
RK09	1	1	1	RI05472180	4.7kΩ	
RK10	1	1	1	RI05472180	4.7kΩ	
RK11	1	1	1	RI05224180	220kΩ	
RK12	1	1	1	RI05224180	220kΩ	

● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	N	A	PART NO.	DESCRIPTION	
RK13	1	1	1	RI05333180	33kΩ	
RK14	1	1	1	RI05333180	33kΩ	
RK15	1	1	1	RI05392180	3.9kΩ	
RK16	1	1	1	RI05392180	3.9kΩ	
RK17	1	1	1	RI05331180	330Ω	
RK18	1	1	1	RI05331180	330Ω	
RK19	1	1	1	RI05392180	3.9kΩ	
RK20	1	1	1	RI05392180	3.9kΩ	
RK23	1	1	1	RI05105180	1MΩ	
RK24	1	1	1	RI05105180	1MΩ	
RK25	1	1	1	RI05103180	10kΩ	
RK26	1	1	1	RI05103180	10kΩ	
RK27	1	1	1	RI05272180	2.7kΩ	
RK28	1	1	1	RI05272180	2.7kΩ	
RK29	1	1	1	RI05104180	100kΩ	
RK30	1	1	1	RI05104180	100kΩ	
RK31	1	1	1	RI05472180	4.7kΩ	
RK32	1	1	1	RI05472180	4.7kΩ	
RK33	1	1	1	RI05152180	1.5kΩ	
RK34	1	1	1	RI05152180	1.5kΩ	
RK35	1	1	1	RI05684180	680kΩ	
RK36	1	1	1	RI05684180	680kΩ	
RK37	1	1	1	RI05392180	3.9kΩ	
RK38	1	1	1	RI05392180	3.9kΩ	
RK39	1	1	1	RI05124180	120kΩ	
RK40	1	1	1	RI05124180	120kΩ	
RK41	1	1	1	RA04730600	47kΩ	Trimming
RK42	1	1	1	RA04730600	47kΩ	Trimming
RK43	1	1	1	RI05472180	4.7kΩ	
RK44	1	1	1	RI05472180	4.7kΩ	
RK45	1	1	1	RI05153180	15kΩ	
RK46	1	1	1	RI05153180	15kΩ	
RK47	1	1	1	RI05224180	220kΩ	
RK48	1	1	1	RI05224180	220kΩ	
RK49	1	1	1	RI05275180	2.7MΩ	
RK50	1	1	1	RI05275180	2.7MΩ	
RK51	1	1	1	RI05333180	33kΩ	
RK52	1	1	1	RI05333180	33kΩ	
RK53	1	1	1	RI05222180	2.2kΩ	
RK54	1	1	1	RI05222180	2.2kΩ	
RK55	1	1	1	RI05472180	4.7kΩ	
RK56	1	1	1	RI05472180	4.7kΩ	
RK57	1	1	1	RI05562180	5.6kΩ	
RK58	1	1	1	RI05562180	5.6kΩ	
RK59	1	1	1	RI05682180	6.8kΩ	
RK60	1	1	1	RI05682180	6.8kΩ	
RK61	1	1	1	RI05122180	1.2kΩ	
RK62	1	1	1	RI05122180	1.2kΩ	
RK63	1	1	1	RI05332180	3.3kΩ	
RK64	1	1	1	RI05332180	3.3kΩ	
RK65	1	1	1	RI05560180	56Ω	
RK66	1	1	1	RI05560180	56Ω	
RK67	1	1	1	RI05101180	100Ω	
RK68	1	1	1	RI05101180	100Ω	
RK69	1	1	1	RI05392180	3.9kΩ	
RK70	1	1	1	RI05392180	3.9kΩ	
RK71	1	1	1	RI05681180	680Ω	
RK72	1	1	1	RI05681180	680Ω	
RK73	1	1	1	RA01040600	100kΩ	Trimming
RK74	1	1	1	RA01040600	100kΩ	Trimming

REF. DESIG.	Q'TY U	N	A	PART NO.	DESCRIPTION	
RK75	1	1	1	RI05105180	1MΩ	
RK76	1	1	1	RI05105180	1MΩ	
RK77	1	1	1	RI05474180	470kΩ	
RK78	1	1	1	RI05474180	470kΩ	
RK79	1	1	1	RI05103180	10kΩ	
RK80	1	1	1	RI05103180	10kΩ	
RK81	1	1	1	RI05103180	10kΩ	
RK82	1	1	1	RI05103180	10kΩ	
RK83	1	1	1	RI05561180	560Ω	
RK84	1	1	1	RI05561180	560Ω	
RK85	1	1	1	RD05030190	50kΩ	Variable
RK86	1	1	1	RI05473180	47kΩ	
RK87	1	1	1	RI05103180	10kΩ	
RK88	1	1	1	RI05103180	10kΩ	
RK90	1	1	1	RI05102180	1kΩ	
RK92	1	1	1	RI05102180	1kΩ	
RK93	1	1	1	RI05472180	4.7kΩ	
RK94	1	1	1	RI05472180	4.7kΩ	
RK96	1	1	1	RI05000180	0Ω	
RL01	1	1	1	RI05022180	2.2Ω	
RL02	1	1	1	RI05022180	2.2Ω	
RL03	1	1	1	RI05222180	2.2kΩ	
RL04	1	1	1	RI05222180	2.2kΩ	
RL05	1	1	1	RI05472180	4.7kΩ	
RL06	1	1	1	RI05222180	2.2kΩ	
RL07	1	1	1	RA02230600	22kΩ	Trimming
RL08	1	1	1	RA02230600	22kΩ	Trimming
RL10	1	1	1	RI05101180	100Ω	
RL11	1	1	1	RI05101180	100Ω	
RL12	1	1	1	RI05000180	0Ω	
RL13	1	1	1	GD05472160	4.7kΩ	1/6W
RL51	1	1	1	RI05047180	4.7Ω	
RU01	1	1	1	RI05101180	100Ω	
RU02	1	1	1	RI05104180	100kΩ	
RU03	1	1	1	RI05224180	220kΩ	
RU04	1	1	1	RI05224180	220kΩ	
RU05	1	1	1	RI05224180	220kΩ	
RU06	1	1	1	RI05224180	220kΩ	
RU07	1	1	1	RI05334180	330kΩ	
RU08	1	1	1	RI05224180	220kΩ	
RU09	1	1	1	RI05102180	1kΩ	
RU10	1	1	1	RA04730600	47kΩ	Trimming
RU11	1	1	1	GD05561140	560Ω	1/4W

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
					PK01-SEMICONDUCTORS
Q603	1	1	1	BA20002210	Semiconductor DTC-124S
Q701	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q702	1	1	1	HC10112060	IC Headphone Amp
Q703	1	1	1	HT410203A0	Transistor 2SD1020 (H,F)
Q704	1	1	1	BA20002210	Semiconductor DTC-124S
Q801	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
Q802	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
Q803	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q804	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q805	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q806	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q807	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q808	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q809	1	1	1	HC10055020	IC AN6291S
Q901	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q902	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q903	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q904	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q905	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q906	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q907	1	1	1	HC10055020	IC AN6291S
QG01	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
QG02	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
QG03	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
QG04	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
QG05	1	1	1	BA20002210	Semiconductor DTC124S
QG06	1	1	1	BA20002210	Semiconductor DTC124S
QG07	1	1	1	BA20002210	Semiconductor DTC124S
QG08	1	1	1	BA20002210	Semiconductor DTC124S
QG10	1	1	1	HX111621A0	Transistor 2SA1162 G
QG51	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QG61	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
QG62	1	1	1	BA20002210	Semiconductor DTC124S
QK01	1	1	1	BA20002210	Semiconductor DTC124S
QK02	1	1	1	BA20002210	Semiconductor DTC124S
QK03	1	1	1	BA20002210	Semiconductor DTC124S
QK04	1	1	1	BA20002210	Semiconductor DTC124S
QK05	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
QK06	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
QK11	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
QK12	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
QK13	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QK14	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QK15	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK16	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK17	1	1	1	HX413281R0	Transistor 2SD1328 R
QK18	1	1	1	HX413281R0	Transistor 2SD1328 R
QK19	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK20	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK21	1	1	1	BA20002210	Semiconductor DTC124S
QK22	1	1	1	BA20002210	Semiconductor DTC124S
QK23	1	1	1	BA20002210	Semiconductor DTC124S
QK24	1	1	1	BA20002210	Semiconductor DTC124S
QK25	1	1	1	BA20002210	Semiconductor DTC124S
QK26	1	1	1	BA20002210	Semiconductor DTC124S
QK27	1	1	1	HX317121A0	Transistor 2SC2712 G Chip
QK28	1	1	1	HX317121A0	Transistor 2SC2712 G Chip
QK29	1	1	1	HX317121A0	Transistor 2SC2712 G Chip
QK30	1	1	1	HX317121A0	Transistor 2SC2712 G Chip
QK33	1	1	1	HX317121A0	Transistor 2SC2712 G Chip
QK34	1	1	1	BA20002210	Semiconductor DTC124S
QK35	1	1	1	HC406600Z0	IC 4066
QK37	1	1	1	HC406600Z0	IC 4066
QK39	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK40	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
QK41	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QK42	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QK44	1	1	1	BA20002210	Semiconductor DTC124S
QK45	1	1	1	BA20002210	Semiconductor DTC124S
QK46	1	1	1	BA20002210	Semiconductor DTC124S
QK47	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QK48	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QL01	1	1	1	HT320011L0	Transistor 2SC2001 L
QL02	1	1	1	HT320011L0	Transistor 2SC2001 L
QL03	1	1	1	HT409732B0	Transistor 2SD973 (R,S)
⚠ QU01	1	1	1	HT410203A0	Transistor 2SD1020 (H,F)
QU02	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
QU03	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
QU04	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
DK01	1	1	1	HZ20005020	Diode MA153 Chip
DK02	1	1	1	HZ20005020	Diode MA153 Chip
DK03	1	1	1	HZ20003020	Diode MA151K Chip
DK04	1	1	1	HZ20003020	Diode MA151K Chip
DK05	1	1	1	HZ20001020	Diode MA151WK Chip
DK11	1	1	1	HZ20003020	Diode MA151K Chip
DK12	1	1	1	HZ20003020	Diode MA151K Chip
DK20	1	1	1	HZ20001020	Diode MA151WK Chip
DK21	1	1	1	HZ20001020	Diode MA151WK Chip
DK22	1	1	1	HD30034060	Zener RD3.6E
DL01	1	1	1	HZ20003020	Diode MA151K Chip
⚠ DU01	1	1	1	HD30002020	Zener
DU02	1	1	1	HD20001000	Diode IS1555 etc.
DU05	1	1	1	HD20001000	Diode IS1555 etc.
DU06	1	1	1	HD20001000	Diode IS1555 etc.
					PK01-MISCELLANEOUS
J701	1	1	1	YJ01002280	Jack
	1	1	1		
JG01	1	1	1	YJ01002280	Jack Mic L
JG02	1	1	1	YJ01002280	Jack Mic R
JG03	1	1	1	BY01130010	Jack RCA/DIN
JK01	1	1	1	YJ04000840	Jack DC Input
JK02	1	1	1	YJ06003090	Jack (9P)
JK03	1	1	1	YJ06003270	Jack (7P)
JK04	1	1	1	YJ06003040	Jack (4P)
JK05	1	1	1	YJ06003090	Jack (9P)
JK06	1	1	1	YJ06002560	Jack (6P)
JK07	1	1	1	YJ06002560	Jack (6P)
JK08	1	1	1	YJ06002540	Jack (4P)
JK09	1	1	1	YJ06002560	Jack (6P)
JK11	1	1	1	YJ06003040	Jack (4P)

● (U) for U.S.A.
● (N) for Europe
● (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
JL01	1	1	1	YJ06003050	Jack (5P)
L601	1	1	1	LS10440060	M.P.X. Coil
LG61	1	1	1	LS10440060	M.P.X. Coil
LJ01	1	1	1	LC22260100	Choke Coil 22mH
LJ02	1	1	1	LC22260100	Choke Coil 22mH
LK01	1	1	1	LC25650700	Choke Coil
LK02	1	1	1	LC25650700	Choke Coil
LK03	1	1	1	LC24760520	Choke Coil
LK04	1	1	1	LC24760520	Choke Coil
LL01	1	1	1	TC10110010	OSC Transf.
⚠ LL51	1	1	1	TC10200090	OSC Transf.
LL52	1	1	1	LC14730040	Choke Coil
LL53	1	1	1	LC21050700	Choke Coil
S701	1	1	1	SS01030040	Slide Switch Speaker Monitor Mode
S702	1	1	1	SS01020490	Slide Switch Speaker Monitor ON/OFF
SK01	1	1	1	SP02020730	Push Switch Limiter
SK02	1	1	1	SP02020740	Push Switch Batt/Light
SK03	1	1	1	SP02020730	Push Switch Monitor
SK04	1	1	1	SP02020740	Push Switch Rec/Play
					P601-DOLBY (L) CIRCUUIT BOARD
P601	1	1	1	WB154T1520	P.W. Board Dolby (L)
	1	1	1	ZZ154T1520	P.W. Board Assembly
					P601-CAPACITORS
C601	1	1	1	EJ47502510	Elect 4.7µF 25V
C603	1	1	1	DD45271300	Ceramic 270pF ±5%
C604	1	1	1	EJ22505010	Elect 2.2µF 50V
C605	1	1	1	EJ10700610	Elect 100µF 6.3V
C606	1	1	1	EV68401670	Elect 0.68µF 16V
C607	1	1	1	EJ22405010	Elect 0.22µF 50V
C608	1	1	1	DF15682350	Film 6800pF ±5%
C609	1	1	1	EJ22505010	Elect 2.2µF 50V
C610	1	1	1	EJ33503510	Elect 3.3µF 35V
C611	1	1	1	DF15333350	Film 0.033µF ±5%
C612	1	1	1	DF15492350	Film 4700pF ±5%
C613	1	1	1	EJ33503510	Elect 3.3µF 35V
C614	1	1	1	EJ22505010	Elect 2.2µF 50V
C615	1	1	1	EJ47502510	Elect 4.7µF 25V
C616	1	1	1	EJ22505010	Elect 2.2µF 50V
C617	1	1	1	EJ33503510	Elect 3.3µF 35V
C618	1	1	1	EV68401670	Elect 0.68µF 16V
C619	1	1	1	EJ22405010	Elect 0.22µF 50V
C620	1	1	1	DF15682350	Film 6800pF ±5%
C621	1	1	1	EJ22505010	Elect 2.2µF 50V
C622	1	1	1	DF15472350	Film 4700pF ±5%
C623	1	1	1	DF15333350	Film 0.033µF ±5%
C624	1	1	1	EJ33503510	Elect 3.3µF 35V
C625	1	1	1	EJ22601610	Elect 22µF 16V
C626	1	1	1	EJ22505010	Elect 2.2µF 50V
C627	1	1	1	EJ22505010	Elect 2.2µF 50V
C628	1	1	1	DK46562300	Ceramic 5600pF ±10%
C629	1	1	1	EJ22505010	Elect 2.2µF 50V
C630	1	1	1	EJ22505010	Elect 2.2µF 50V
C631	1	1	1	EJ10700610	Elect 100µF 6.3V

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
					P601-RESISTORS (All Resistors are ±5% & 1/8W Chip)
R601	1	1	1	RI05224180	220kΩ
R603	1	1	1	RI05224180	220kΩ
R604	1	1	1	RI05224180	220kΩ
R605	1	1	1	RI05102180	1kΩ
R606	1	1	1	RI05153180	15kΩ
R607	1	1	1	RI05473180	47kΩ
R608	1	1	1	RI05684180	680kΩ
R609	1	1	1	RI05271180	270Ω
R610	1	1	1	RI05222180	2.2kΩ
R612	1	1	1	RI05224180	220kΩ
R613	1	1	1	RI05224180	220kΩ
R614	1	1	1	RI05153180	15kΩ
R615	1	1	1	RI05102180	1kΩ
R616	1	1	1	RI05473180	47kΩ
R617	1	1	1	RI05332180	3.3kΩ
R618	1	1	1	RI05472180	4.7kΩ
R619	1	1	1	RI05332180	3.3kΩ
R620	1	1	1	RI05472180	4.7kΩ
R621	1	1	1	RI05330180	33Ω
R622	1	1	1	RI05124180	120kΩ
R623	1	1	1	RI05272180	2.7kΩ
R624	1	1	1	RI05104180	100kΩ
R625	1	1	1	RI05104180	100kΩ
R667	1	1	1	RI05000180	0Ω
					P601-SEMICONDUCTORS
Q601	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q602	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip
Q604	1	1	1	HC10062010	IC HA12048
					P601-MISCELLANEOUS
J601	1	1	1	YP06002560	Plug (6P)
J602	1	1	1	YP06002560	Plug (6P)
P602	1	1	1	WB154T0010	P.W. Board Dolby (R)
	1	1	1	ZZ154T0010	P.W. Board Assembly
					P602-CAPACITORS
C652	1	1	1	EJ10700610	Elect 100µF 6.3V
C653	1	1	1	EV68401670	Elect 0.68µF 16V
C654	1	1	1	EJ22405010	Elect 0.22µF 50V
C655	1	1	1	DF15682350	Film 6800pF ±5%
C656	1	1	1	EJ22505010	Elect 2.2µF 50V
C657	1	1	1	DF15333350	Film 0.033µF ±5%
C658	1	1	1	DF15472350	Film 4700pF ±5%
C659	1	1	1	EJ33503510	Elect 3.3µF 35V
C660	1	1	1	EJ33503510	Elect 3.3µF 35V
C661	1	1	1	EJ22505010	Elect 2.2µF 50V
C662	1	1	1	EJ33503510	Elect 3.3µF 35V
C663	1	1	1	EV68401670	Elect 0.68µF 16V
C664	1	1	1	EJ22405010	Elect 0.22µF 50V
C665	1	1	1	DF15682350	Film 6800pF ±5%
C666	1	1	1	EJ22505010	Elect 2.2µF 50V
C667	1	1	1	DF15333350	Film 0.033µF ±5%
C668	1	1	1	EJ33503510	Elect 3.3µF 35V
C669	1	1	1	DF15472350	Film 4700pF ±5%
C670	1	1	1	EJ22601610	Elect 22µF 16V
C671	1	1	1	EJ22505010	Elect 2.2µF 50V
C672	1	1	1	EJ22505010	Elect 2.2µF 50V

• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
					P602-RESISTORS (All Resistors are ±5% & 1/8W Chip)
R651	1	1	1	RI05224180	220kΩ
R652	1	1	1	RI05224180	220kΩ
R653	1	1	1	RI05102180	1kΩ
R654	1	1	1	RI05153180	15kΩ
R655	1	1	1	RI05473180	47kΩ
R656	1	1	1	RI05224180	220kΩ
R657	1	1	1	RI05224180	220kΩ
R658	1	1	1	RI05102180	1kΩ
R659	1	1	1	RI05153180	15kΩ
R660	1	1	1	RI05473180	47kΩ
R661	1	1	1	RI05332180	3.3kΩ
R662	1	1	1	RI05472180	4.7kΩ
R663	1	1	1	RI05472180	4.7kΩ
R664	1	1	1	RI05332180	3.3kΩ
R665	1	1	1	RI05330180	33Ω
R666	1	1	1	RI05272180	2.7kΩ
					P602-SEMICONDUCTOR
Q651	1	1	1	HC10062010	IC HA12048
					P602-MISCELLANEOUS
J651	1	1	1	YP06002540	Plug (4P)
J652	1	1	1	YP06002560	Plug (6P)
					PJ01-TAPE EQ CIRCUIT BOARD
PJ01	1	1	1	WC154T2430	P.W. Board Tape EQ.
	1	1	1	ZZ154T2430	P.W. Board Assembly
					PJ01-CAPACITORS
CJ01	1	1	1	DD45121300	Ceramic 120pF ±5%
CJ02	1	1	1	DD45121300	Ceramic 120pF ±5%
CJ03	1	1	1	EJ10601610	Elect 10μF 16V
CJ04	1	1	1	EJ10601610	Elect 10μF 16V
CJ05	1	1	1	DK46102300	Ceramic 1000pF ±10%
CJ06	1	1	1	DK46102300	Ceramic 1000pF ±10%
CJ09	1	1	1	EJ10601610	Elect 10μF 16V
CJ10	1	1	1	EJ10601610	Elect 10μF 16V
CJ11	1	1	1	DF15223350	Film 0.022μF ±5%
CJ12	1	1	1	DF15223350	Film 0.022μF ±5%
CJ13	1	1	1	EJ22505010	Elect 2.2μF 50V
CJ14	1	1	1	EJ22505010	Elect 2.2μF 50V
CJ15	1	1	1	EJ47601610	Elect 47μF 16V
CJ16	1	1	1	EJ47601610	Elect 47μF 16V
CJ17	1	1	1	EA10701610	Elect 100μF 16V
CJ21	1	1	1	DK46102300	Ceramic 1000pF ±10%
CJ22	1	1	1	DK46102300	Ceramic 1000pF ±10%
CJ23	1	1	1	DD45151300	Ceramic 150pF ±5%
CJ24	1	1	1	DD45151300	Ceramic 150pF ±5%
					PJ01-RESISTORS (All Resistors are ±5% & 1/8W Chip)
RJ03	1	1	1	RI05154180	150kΩ
RJ04	1	1	1	RI05154180	150kΩ
RJ05	1	1	1	RI05820180	82Ω
RJ06	1	1	1	RI05820180	82Ω
RJ07	1	1	1	RI05104180	100kΩ
RJ08	1	1	1	RI05104180	100kΩ
RJ09	1	1	1	RI05562180	5.6kΩ
RJ10	1	1	1	RI05562180	5.6kΩ
RJ11	1	1	1	RI05154180	150kΩ
RJ12	1	1	1	RI05154180	150kΩ
RJ13	1	1	1	RI05153180	15kΩ
RJ14	1	1	1	RI05153180	15kΩ
RJ15	1	1	1	RI05271180	270Ω
RJ16	1	1	1	RI05271180	270Ω
RJ17	1	1	1	RI05122180	1.2kΩ
RJ18	1	1	1	RI05122180	1.2kΩ
RJ19	1	1	1	RI05332180	3.3kΩ
RJ20	1	1	1	RI05332180	3.3kΩ
RJ21	1	1	1	RI05333180	33kΩ
RJ22	1	1	1	RI05333180	33kΩ

REF. DESIG.	Q'TY U	Q'TY N	Q'TY A	PART NO.	DESCRIPTION
					PJ01-SEMICONDUCTORS
QJ01	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ02	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ03	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ04	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
					PJ01-MISCELLANEOUS
JJ01	1	1	1	YJ06003040	Jack (4P)
	1	1			
WJ01	1	1	1	YB00110140	Connective Cord (4P)
					PK02-MIC MODE CIRCUIT BOARD
PK02	1	1	1	WB154T1540	P.W. Board Mic Mode
	1	1	1	ZZ154T1540	P.W. Board Assembly
					PK02-SEMICONDUCTOR
DS02	1	1	1	HZ20003020	Diode MA151K Chip
					PK02-MISCELLANEOUS
S201	1	1	1	SS02020740	Slide Switch Mic Mode
					PK03-MIC ATTENUATOR CIRCUIT BOARD
PK03	1	1	1	WB154T1550	P.W. Board Mic Attenuator
	1	1	1	ZZ154T1550	P.W. Board Assembly
					PK03-MISCELLANEOUS
S301	1	1	1	SS01030050	Slide Switch Mic Att.
					PK04-MONITOR CIRCUIT BOARD
PK04	1	1	1	WZ154T0020	P.W. Board Monitor
	1	1	1	ZZ154T0020	P.W. Board Assembly
					PK04-RESISTORS (All Resistors are ±5% & 1/8W Chip)
RE07 ~ RE10	4	4	4	RI05104180	100kΩ
					PK04-SEMICONDUCTORS
QK49	1	1	1	BA20002210	Semiconductor DTC124S
QK50	1	1	1	BA20002210	Semiconductor DTC124S
					PM01-MOTOR CIRCUIT BOARD
PM01	1	1	1	WC154T2420	P.W. Board Motor
	1	1	1	ZZ154T2420	P.W. Board Assembly
					PM01-CAPACITORS
CM01	1	1	1	EJ22505010	Elect 2.2μF 50V
CM02	1	1	1	EJ10700610	Elect 100μF 6.3V
CM03	1	1	1	EA22701630	Elect 220μF 16V
CM04	1	1	1	EJ10601610	Elect 10μF 16V
CM05	1	1	1	EJ10601610	Elect 10μF 16V
CM06	1	1	1	EJ10701010	Elect 100μF 10V
CM07	1	1	1	EJ22601610	Elect 22μF 16V
CM08	1	1	1	EJ22601610	Elect 22μF 16V
CM09	1	1	1	DK46102300	Ceramic 1000pF ±10%
CM10	1	1	1	DF15334350	Film 0.33μF ±5%
CM11	1	1	1	DK18103310	Ceramic 0.01μF +80%, −20%
CM12	1	1	1	EJ10505010	Elect 1μF 50V

• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY U	N	A	PART NO.	DESCRIPTION
					PM01-RESISTORS (All Resistors are ±5% & 1/8W Chip)
RM01	1	1	1	NB50052390	0.5Ω 1/2W
RM02	1	1	1	RI05027180	2.7Ω
RM03	1	1	1	RI05821180	820Ω
RM04	1	1	1	NB51032200	10kΩ 1/2W
RM05	1	1	1	RA01020600	1kΩ Trimming
RM06	1	1	1	RI05473180	47kΩ
RM07	1	1	1	RI05472180	4.7kΩ
RM08	1	1	1	RI05472180	4.7kΩ
RM09	1	1	1	RI05473180	47kΩ
RM10	1	1	1	RI05473180	47kΩ
RM11	1	1	1	RI05821180	820Ω
RM12	1	1	1	RI05821180	820Ω
					PM01-SEMICONDUCTORS
QM01	1	1	1	HC10037020	IC AN6612
QM02	1	1	1	HT10966100	Transistor 2SA966 0
QM03	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QM04	1	1	1	BA20002210	Semiconductor DTC124S
QM05	1	1	1	BA20002210	Semiconductor DTC124S
QM06	1	1	1	HX413281R0	Transistor 2SD1328 Chip
QM07	1	1	1	HC10039210	IC BA337
QM08	1	1	1	HC10024020	IC DN6838
DM01	1	1	1	HD20015030	Diode DS-153D
DM02	1	1	1	HZ20001020	Diode MA151WK Chip
DM03	1	1	1	HZ20001020	Diode MA151WK Chip
DM04	1	1	1	HZ20001020	Diode MA151WK Chip
DM05	1	1	1	HZ20001020	Diode MA151WK Chip
DM06	1	1	1	HZ20001020	Diode MA151WK Chip
DM07	1	1	1	HZ20001020	Diode MA151WK Chip
DM08	1	1	1	HZ20001020	Diode MA151WK Chip
					PM01-MISCELLANEOUS
WM01	1	1	1	YB00190100	Connective Cord
WM02	1	1	1	YZ03060260	Jumper Lead
WM03	1	1	1	YU05057800	Jumper Lead
					PS01-SWITCH CIRCUIT BOARD
PS01	1	1	1	WC154T2410	P.W. Board Switch
	1	1	1	ZZ154T2410	P.W. Board Assembly
					PS01-CAPACITOR
CS01	1	1	1	DF15334350	Film 0.33µF ±5%
					PS01-RESISTORS (All Resistors are ±5% & 1/8W Chip)
RS01	1	1	1	RI05153180	15kΩ
RS02	1	1	1	RI05332180	3.3kΩ
RS03	1	1	1	RI05182180	1.8kΩ
RS04	1	1	1	RB02020020	2kΩ Variable
RS06	1	1	1	RB02020020	2kΩ Variable
RS07	1	1	1	GJ05010010	1Ω 1W
RS08	1	1	1	RI05103180	10kΩ
RS09	1	1	1	RI05473180	47kΩ
RS10	1	1	1	RI05153180	15kΩ
RS11	1	1	1	RI05682180	6.8kΩ
RS12	1	1	1	RI05124180	120kΩ
RS13	1	1	1	RI05684180	680kΩ
RS14	1	1	1	RI05102180	1kΩ
RS15	1	1	1	GD05564180	560kΩ
RS16	1	1	1	GD05104180	100kΩ

REF. DESIG.	Q'TY U	N	A	PART NO.	DESCRIPTION
					PS01-SEMICONDUCTORS
QS01	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
QS02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DS01	1	1	1	HZ20003020	Diode MA151K Chip
					PS01-MISCELLANEOUS
JS01	1	1	1	YB00130210	Connective Cord
JS02	1	1	1	YB00290060	Connective Cord
SS01	1	1	1	SS01020470	Slide Switch Memory Rew.
SS02	1	1	1	SS01020470	Slide Switch MPX Filter
SS03	1	1	1	SS01030030	Slide Switch N.R.
SS04	1	1	1	SS02030250	Slide Switch Tape Selector
					PX01-METER LED CIRCUIT BOARD
PX01	1	1	1	WC154T2440	P.W. Board Meter LED
	1	1	1	ZZ154T2440	P.W. Board Assembly
					PX01-CAPACITORS
CX01	1	1	1	EJ10601610	Elect 10µF 16V
					PX01-RESISTORS (All Resistors are ±5% & 1/8W Chip)
RX01	1	1	1	RI05221180	220Ω
RX02	1	1	1	RI05105180	1MΩ
RX03	1	1	1	RI05105180	1MΩ
RX04	1	1	1	RI05330180	33Ω
RX05	1	1	1	RI05330180	33Ω
RX06	1	1	1	RI05103180	10kΩ
RX07	1	1	1	RI05473180	47kΩ
RX11	1	1	1	RI05391180	390Ω
RX12	1	1	1	RI05391180	390Ω
					PX01-SEMICONDUCTORS
QX01	1	1	1	HC401100Z0	IC 4011
QX02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DX01	1	1	1	HI10017210	L.E.D. LED
DX02	1	1	1	HI10017210	L.E.D. LED
					PX01-MISCELLANEOUS
WX01	1	1	1	YB00120170	Connective Cord (7P)
					PX02-PEAK/REC INDICATOR CIRCUIT BOARD
PX02	1	1	1	WB154T1530	P.W. Board Peak/Rec Indicator
	1	1	1	ZZ154T1530	P.W. Board Assembly
					PZ01-SEMICONDUCTORS
DX11	1	1	1	HI10056020	L.E.D. Rec.
DX02	1	1	1	HI10025020	L.E.D. Peak Ind.

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

NOTE ON SAFETY:
Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ⚠ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

9. TECHNICAL SPECIFICATIONS

Tape Drive System	Single Capstan Drive
Cartridge	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.
Heads	3 Head System
	Record: Super Hard Metal Alloy
	Playback: Super Hard Metal Alloy
	Erase: Dual Gap Metal Alloy
Motor	DC Servo Motor
Overall Frequency Response at 25 dB below O VU	
Normal Tape	30 Hz ~16 kHz
CrO_2 Tape	20 Hz ~18 kHz
Metal Tape	20 Hz ~20 kHz
Signal-to-Noise Ratio: with A-Curve Filter to 3% Distortion (K3)	
Dolby OFF	59 dB
Dolby B (ON)	65 dB
dbx (ON)	80 dB
Wow and Flutter	
DIN WTD	0.15%
Outputs	
Line Level/Impedance	500 mV/3 k ohms
Headphone Level/Impedance	3 mV/8 ohms
DIN Level/Impedance	500 mV/3 k ohms
Input (Level at 0 VU)	
Line Sensitivity/Impedance	100 mV/50 k ohms
Mic Sensitivity/Impedance	0.32 mV/10 k ohms
DIN Sensitivity/Impedance	0.1 mV/k ohms
Fast Rewind Time	110 sec. (C-60)
Fast Forward Time	110 sec. (C-60)
Power Requirements	3 Batteries: R20/Size "D"
	Rechargeable Battery: Model RBD 430 (optional)
	AC adapter: 110–120V, 220–240V
	AC 50, 60 Hz
Power Consumption	AC 6.5W/DC 3.5W
Dimensions	
Panel Width	227 mm
Panel Height	50 mm
Depth	165 mm
Weight	1.3 kg

Specifications and appearance are subject to change for modification without notice.

NOTES

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